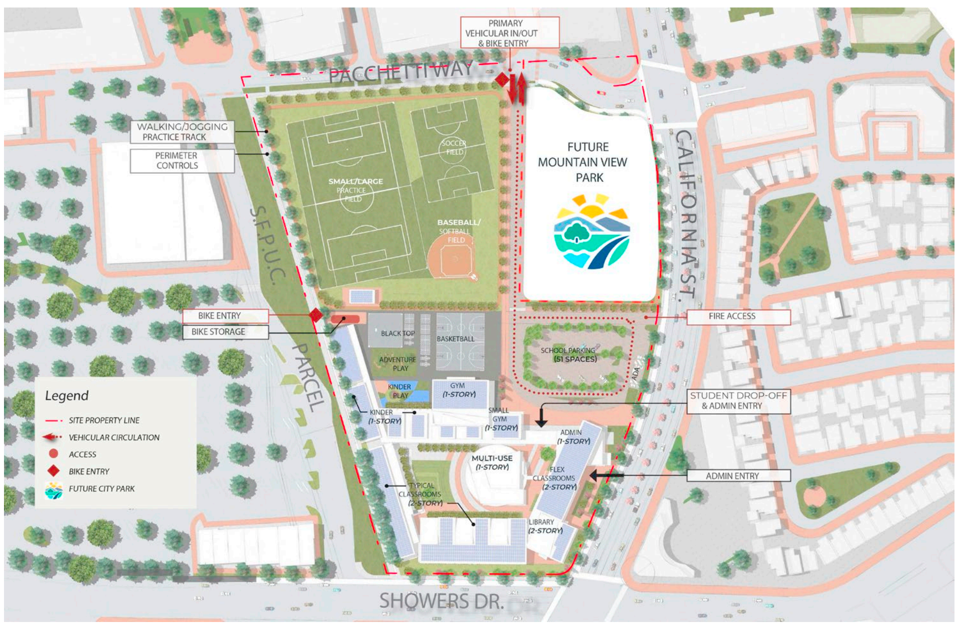
# DRAFT EIR

for the

# LOS ALTOS SCHOOL DISTRICT
# 10TH SITE SCHOOL PROJECT

STATE CLEARINGHOUSE NUMBER 2022070275




Prepared for

Los Altos School District

March 2024

Prepared by

Amy Skewes-Cox, AICP

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*In conjunction with*

BASELINE ENVIRONMENTAL CONSULTING
HORIZON WATER & ENVIRONMENT
NATALIE MACRIS
PARAMETRIX
PEARCE SERVICES
TOM CAMARA GRAPHICS
WORDSMITH WORD PROCESSING

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# 1. INTRODUCTION

This document is an Environmental Impact Report (EIR) for the Los Altos School District (LASD) Site No. 10 School project (project) in Mountain View, prepared in accordance with the California Environmental Quality Act (CEQA) of 1970, as amended.

CEQA requires that, before a project with potentially significant environmental effects may be approved, an EIR must be prepared that fully describes the environmental effects of the project, identifies mitigation measures to lessen or eliminate adverse impacts, and examines feasible alternatives to the project (CEQA Guidelines Section15121(a)). An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information that enables them to make a decision that intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure (CEQA Guidelines Section15151).

This EIR is intended to provide the information and environmental analyses necessary to help the public understand the project and its likely environmental consequences, and to assist public agency decision-makers in considering the approvals necessary to implement the proposed project. As stated in Section 15125(a) of the CEQA Guidelines, the EIR addresses "baseline" conditions, which are the physical environmental conditions at the project site and vicinity that existed at the time of publication of the Notice of Preparation (NOP) (see **Appendix A**).The project impacts are then evaluated in comparison to these baseline conditions. In identifying the significant impacts of the project, this EIR concentrates on the project's substantial physical effects and on mitigation measures to avoid, reduce, or otherwise alleviate those effects. This EIR also describes and analyzes a reasonable range of alternatives, including a "No Project" alternative as required under CEQA (CEQA Guidelines Section 15126.6). The determinations of the "Lead Agency" (LASD) concerning the feasibility, acceptance, or rejection of each and all alternatives considered in this EIR will be addressed and resolved in LASD's findings when it considers approval of the project, as required by CEQA.

Pursuant to California Government Code Section 53094, the governing board of a school district may render city or county zoning ordinances and general plan requirements inapplicable to a proposed classroom facilities project. Even though LASD has adopted a resolution[1] pursuant to Section 53094 exempting the project and the campus from any zoning ordinances or regulations of the City of Mountain View (City), including, without limitation, the City's Municipal Code, the City's General Plan, and related ordinances and regulations that otherwise would be applicable, this EIR evaluates the project's consistency with local land use regulations and policies for the purposes of CEQA compliance, and also because it is LASD's goal that local land use policies and regulations be acknowledged and adhered to as much as feasible.

[1] The Los Altos School District adopted Resolution No. 22/23-13 on April 3, 2023, to exempt itself from local land use controls.

## 1.1 PROJECT SUMMARY

LASD is preparing an EIR for a new school campus, to be located in a portion of the San Antonio Center shopping center at the intersection of California Street and Showers Drive in Mountain View (see Figures 3-1 and 3-2 in *Chapter 3, Project Description*, of this EIR). With the project, LASD would develop its tenth school campus, which may serve a range of grades and student populations over time. As LASD serves grades Kindergarten (K) through 8, the only format that is ruled out is high school. CEQA requires that LASD conduct environmental review of the project, which has the potential to result in physical change in the environment. LASD is the "Lead Agency" for the project and is the public agency with the principal responsibility for approving and carrying out the project. LASD has determined that an EIR will be the required CEQA document for the project.

The four existing commercial buildings on the project site would be demolished and the parking lots and landscape areas thoroughly regraded, repaved, and replanted. The proposed school facilities that would be built on the site would include library, administration, and multi-purpose buildings that are planned for change and expansion. The facilities could serve up to 900 students, although the school might initially serve 600 or fewer students. The EIR evaluates a student population of 900 students.

Under the Open Space Park Property Transfer Agreement between LASD and the City of Mountain View, 2.2 acres of the 11.7-acre project site would be conveyed to the City for future development of a City neighborhood park. The project therefore provides for the 2.2-acre park, which would be owned and maintained by the City and located at the far northwest corner of the site adjacent to Pacchetti Way. Because of the commitment to joint community use for the recreational facilities on the site, the school would have a compact footprint and be developed in a multi-story building type. The gym and library and meeting space would be independently accessible from the perimeter to allow for extended hours for these potential community uses. The EIR evaluates the full buildout square footage.

Separate vehicle entries, parking, and drop-off areas would be provided for the new school. The drop-off area would be located in front of the Administration Building in the main school parking area, in between the school site and the area to be transferred to the City for dedication as a City park. Vehicle access would be from Pacchetti Way along the property line that runs along the park and the athletic field, leading to the school parking area. Two exits would be provided: one on California Street and one on Pacchetti Way. There would be no direct entry from California Street except for emergency vehicles. Approximately 51 parking spaces would be provided, four of which would be handicapped-accessible (under the Americans with Disabilities Act [ADA]). The site would be laid out to allow overflow event parking on the blacktop playground adjacent to the parking area.

While the project provides for a neighborhood park, the City has not completed a design or identified the facilities that would be located in the park; therefore, this EIR addresses the potential park in the analysis of cumulative impacts for each environmental topic, at a generalized level of detail. It is assumed that this neighborhood park would primarily be used during daytime hours.

## 1.2 PUBLIC REVIEW

This Draft EIR will be circulated for review and comment by the public and other interested parties, agencies, and organizations for a 45-day period as indicated on the Public Notice of Availability of this document. During the public review period, written comments on the adequacy of the Draft EIR may be submitted to:

Mr. Erik Walukiewicz
Assistant Superintendent, Business Services
Los Altos School District
201 Covington Road
Los Altos, CA 94024

Written comments via email can be sent to: ewalukiewicz@lasdschools.org.

Responses to all substantive comments received on the adequacy of the Draft EIR and submitted within the specified review period will be prepared and included in the Responses to Comments/ Final EIR. Prior to approval of the project, LASD must certify the Final EIR and adopt a Mitigation Monitoring and Reporting Program (MMRP) for mitigation measures identified in the EIR, in accordance with the requirements of California Public Resources Code (PRC) Section 21001.

## 1.3 ORGANIZATION OF THE EIR

This Draft EIR is organized into the following chapters:

**Chapter 1, Introduction:** Provides an introduction and overview that describes the intended use of this EIR, project background, the EIR process, and organization of the document.

**Chapter 2, Summary:** Briefly describes the project and concerns associated with it, identifies levels of significance for each impact addressed in the EIR, summarizes the project-specific effects of the project, and identifies mitigation measures. **Table 2-2, Summary of Environmental Impacts and Mitigation Measures,** is provided at the end of Chapter 2.

**Chapter 3, Project Description:** Contains information on the project site, project objectives, and project characteristics.

**Chapter 4, Environmental Setting, Impacts, and Mitigation Measures:** Contains an analysis of environmental topics. Each topic is addressed in a separate section. Each section is divided into an *Introduction* that describes the general content and approach used for the topic; an *Environmental Setting* section that describes baseline environmental information; a *Regulatory Framework* section that describes federal, state, and local regulations applicable to the topic; an *Environmental Impacts and Mitigation Measures* section that describes project-specific impacts and mitigation measures, along with cumulative impacts; and a *References* section that lists the resources used in preparing the analysis.

**Chapter 5, Alternatives:** Assesses impacts of two alternatives to the project, a No Project Alternative and a Reduced Scale and No Turf Alternative. The alternatives are compared to the proposed project and an "environmentally superior alternative" is identified.

**Chapter 6, Other CEQA Considerations:** Contains sections required by CEQA, including a discussion of cumulative impacts, growth inducement, and significant unavoidable impacts.

**Chapter 7, EIR Authors:** Lists the people directly involved in preparing this report.

**Chapter 8, References:** Lists the persons, agencies, and organizations contacted and documents used during preparation of this report.

**Appendices:**

| | |
|---|---|
| Appendix A | Notice of Preparation and Comment Letters for Notice of Preparation |
| Appendix B | Scoping Meeting Comments |
| Appendix C | Aesthetics and Lighting Background Information |
| Appendix D | Air Quality Background Data |
| Appendix E | Cultural Background Information |
| Appendix F | Noise |
| Appendix G | Utility Impact Study |

## 1.4 NOTICE OF PREPARATION

A Notice of Preparation (NOP) was prepared on July 15, 2022, by LASD, as the Lead Agency, to obtain comments from agencies and the public regarding issues to be addressed in the EIR. The date of the NOP is the date assumed for the "baseline" conditions against which the environmental impacts of the proposed project are analyzed. The NOP is included in **Appendix A** and can also be viewed on LASD's website at the following address: https://www.lasdschools.org/District/news/11596-Notice-of-Preparation.html.

The NOP was circulated for public review for 30 days between July 15, 2022, and August 15, 2022 (see **Appendix A**). Copies of the comments received in response to the NOP are included in Appendix A of this EIR.

As stated in the NOP, LASD determined that the following environmental factors would not warrant further discussion in the EIR because they are not applicable to the project or project site:

- Agricultural and Forestry Resources
- Mineral Resources
- Population/Housing
- Wildfire

The project site is a built-up commercial area that does not have agricultural, forestry, or mineral resources. The project would not displace substantial numbers of people or any housing and would not induce substantial unplanned population growth. The site is not within a wildfire hazard zone given its urban setting.

This EIR was prepared based on the comments received on the NOP and the project information provided. The following topics were found to have potential environmental impacts and thus are addressed herein in this EIR:

- Aesthetics
- Air Quality

- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

## 1.5 REFERENCES

Gelfand, Lisa, Gelfand Partners Architects, 2022. Personal communication with A. Skewes-Cox, July 22.

Los Altos School District (LASD) and Brookfield Properties Village Residences, 2019. Easement Agreement-Part 1 (Utilities, Drainage and Signage Easements) between the Los Altos School District and Brookfield Properties Village Residences, and Part 2 (Access Easement Agreement) between the Los Altos School District and MGP IX SAC II Properties, LLC.; recorded by the County of Santa Clara on December 12.

Los Altos School District (LASD), 2022. Facilities Master Plan (Draft).

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# 2. SUMMARY

This chapter briefly describes the proposed Los Altos School District 10th Site School project (project). It also summarizes the project-specific impacts and mitigation measures identified in this Environmental Impact Report (EIR) (see **Table 2-1**). Alternatives to the project that will be considered are also summarized.

## 2.1 PROJECT UNDER REVIEW

The Los Altos School District (LASD) is preparing an EIR for a new school campus, to be located on a site at the San Antonio Center shopping mall at the intersection of California Street and Showers Drive in Mountain View (see Figure 3-1 in *Chapter 3, Project Description*). With the project, LASD would develop its tenth school campus, which may serve a range of grades and student populations over time. As LASD serves grades Kindergarten (K) through 8, the only format that is ruled out is high school. The California Environmental Quality Act (CEQA) requires that LASD conduct environmental review of the project, which has the potential to result in physical change in the environment. LASD is the "Lead Agency" for the project and is the public agency with the principal responsibility for approving and carrying out the project.

The four existing commercial buildings on the project site would be demolished and the parking lots and landscape areas thoroughly regraded, repaved, and replanted. The proposed school facilities that would be built on the site would include classroom, library, administration, and multi-purpose buildings that are planned for change and expansion. The EIR evaluates a student population of 900 students.

Under the agreement between LASD and the City of Mountain View (City), 2.2 acres of the 11.7-acre site would be conveyed to the City for future development of a City neighborhood park. Because of the commitment to joint community use for the recreational facilities on the site, the school would have a compact footprint and be developed in a two-story building type. The gym and library and meeting space would be independently accessible from the perimeter to allow for extended hours for these potential community uses. Classrooms would be housed in a two-story building. The total building area at full buildout would be approximately 89,570 square feet. This EIR evaluates the full buildout square footage. About 137,940 square feet of existing commercial buildings would be removed.

Separate vehicle entries, parking, and drop-off areas would be provided for the new school. Car access would be from Pacchetti Way along the property line that runs along the future park site and the athletic field, leading to the school parking area. Two exits would be provided: one on California Street and one on Pacchetti Way. There would be no direct entry from California Street except for emergency vehicles. Approximately 51 parking spaces would be provided, four of which would be handicapped-accessible (under the Americans with Disabilities Act [ADA]). The site would be laid out to allow overflow event parking on the blacktop playground adjacent to the parking area.

### AREAS OF POTENTIAL CONTROVERSY

A Notice of Preparation (NOP) was prepared by LASD to obtain comments from agencies and the public regarding issues to be addressed in the EIR. The NOP is included in **Appendix A** of this EIR and can also be viewed at LASD`s website, at the following address: https://www.lasdschools.org/District/news/11596-Notice-of-Preparation.html.

The NOP was circulated for public review for 30 days between July 15, 2022, and August 15, 2022. Copies of the comments received in response to the NOP are included in **Appendix A** of this EIR.

The EIR was prepared based on the comments received on the NOP and the project information provided. The comments on the NOP addressed concerns related to the following:

- School siting guidelines related to air quality
- Utility impacts
- Compliance with plans/policies
- Transportation analysis, including construction traffic
- Pedestrian and bicycle safety
- Infrastructure improvements and site access
- Compliance with Assembly Bill 52 and Senate Bill 18

The following topics were found to have potential impacts and thus are addressed in this EIR:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

## 2.2 IMPACTS AND MITIGATION MEASURES

Under CEQA, a significant effect on the environment is defined as a substantial or potentially substantial adverse change in any of the physical conditions within the area affected by a project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance (CEQA Guidelines Section 15382). In this EIR, the criteria used to determine whether or not effects are significant are included in *Chapter 4, Environmental Setting, Impacts, and Mitigation Measures*, in the *Environmental Impacts and Mitigation Measures* section for each topic discussion.

All potential impacts identified for the project could be mitigated to a less-than-significant level.

Prior to approval of the project, written findings regarding each of the identified environmental impacts must be prepared. Also, a monitoring program for the mitigation measures must be adopted. This monitoring program will be prepared as part of the Final EIR for this project.

## 2.3 ALTERNATIVES TO THE PROJECT

Two alternatives to the proposed project are evaluated in *Chapter 5, Alternatives*: Alternative 1 – No Project Alternative and Alternative 2 – Reduced Scale and No Turf Alternative. Other alternatives that were considered but rejected are discussed in more detail in *Chapter 5, Alternatives*. The environmental impacts of each alternative are compared to the proposed project. The ability of each alternative to meet project objectives is also evaluated. In addition to the No Project Alternative, the Reduced Scale and No Turf Alternative would be the environmentally superior alternative.

## 2.4 SUMMARY TABLE

Table 2-1 summarizes project impacts and mitigation measures. The table identifies each impact's level of significance both before and after mitigation.

## 2.5 REFERENCES

Gelfand, Lisa, Gelfand Partners Architects, 2022. Personal communication with A. Skewes-Cox, July 22.

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

## TABLE 2-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

| Impact | Level of Significance Without Mitigation | Mitigation Measure | Level of Significance After Mitigation |
|---|---|---|---|
| **Aesthetics** | | | |
| AESTHETICS-1: The project could result in additional light and glare for nearby residential development due to lighting of the sports field at the west edge of the site. | PS | AESTHETICS-1: The following measures shall be implemented to minimize light and glare for nearby residences:<br>a) All outdoor lighting shall be shielded and directed downward to minimize both sky-light and spill light, in accordance with California Code of Regulations (CCR) Title 24 outdoor lighting requirements. Lighting shall be controlled by photocontrols or time switches.<br>b) Using the *Illuminating Engineering Society of North America (IESNA)* criteria, it is recommended that average illuminance in footcandles (fc) be the following: baseball/softball field, 30 fc; soccer field, 30 fc; and practice field, 20 fc.<br>c) Glare shall be limited to a maximum of 9,000 to 10,000 candelas (cd), at 6 feet elevation, at the property line. Field testing using a meter for measurement of glare is not generally practical due to the unavailability of trained technicians and instruments.<br>d) To ensure that the maximum trespass/spill light on residences at the identified locations remains at or below 1.0 fc, field testing shall take place for the actual performance of the system prior to site occupancy.<br>e) Any need to re-aim and/or adjust the luminaires during the initial nighttime testing of the field lights shall be assessed and completed prior to site occupancy. This would ensure that no excessive trespass/spill light remains uncorrected.<br>f) The proposed field lights shall be provided with programmable controls to turn OFF the lights at a pre-set time recommended by the City of Mountain View and agreed to by the Los Altos School District (LASD). Manual controls shall only be provided for testing the lights.<br>g) Additional control features that can be considered are dimming controls that would allow operation of the field illumination to be reduced for practice play when there are no spectators present, as well as for after-game clean-up work. These features have the benefit of allowing some degree of illumination after the prescribed time for when lights must be turned off immediately after a game.<br>The combination of the above mitigation measures would reduce this potential impact to less than significant. | LTS |

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

**TABLE 2-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

| Impact | Level of Significance Without Mitigation | Mitigation Measure | Level of Significance After Mitigation |
|---|---|---|---|
| **Air Quality** | | | |
| AIR-1: Soil disturbance during project construction would generate fugitive dust coarse particulate matter (PM10) and fine particulate matter (PM2.5) emissions that could result in a cumulatively considerable net increase in criteria air pollutants for which the region is in nonattainment. | PS | AIR-1: During project construction, the contractor shall implement a dust control program that includes the following measures recommended by the Bay Area Air Quality Management District (BAAQMD):<br>▪ All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.<br>▪ All haul trucks transporting soil, sand, or other loose material off-site shall be covered.<br>▪ 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.<br>▪ All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).<br>▪ All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.<br>▪ Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by California Airborne Toxic Control Measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.<br>▪ 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.<br>▪ A publicly visible sign shall be posted with the telephone number and person to contact at the Lead Agency (the Los Altos School District) regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations. | LTS |
| **Biological Resources** | | | |
| BIO-1: Development of the proposed school may result in adverse impacts on nesting birds, if present on the project site. Thus, the project could have a substantial adverse effect on species identified as a candidate, sensitive, or special-status species, and interfere substantially with wildlife nursery sites. | PS | BIO-1: Adequate measures shall be taken to avoid inadvertent take of raptor nests and other nesting birds protected under the Migratory Bird Treaty Act when nests are in active use. This shall be accomplished by taking the following steps:<br>▪ If construction is proposed during the nesting season (February through August), a focused survey for nesting raptors and other migratory birds shall be conducted by a qualified biologist within 14 days prior to the onset of vegetation removal or construction in order to identify any active nests on the project site and in the vicinity of proposed construction. | LTS |

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

## TABLE 2-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

| Impact | Level of Significance Without Mitigation | Mitigation Measure | Level of Significance After Mitigation |
|---|---|---|---|
| | | ▪ If no active nests are identified during the survey period, or if development is initiated during the non-breeding season (September through January), construction may proceed with no restrictions.<br>▪ If bird nests are found, an adequate setback shall be established around the nest location and construction activities restricted within this no-disturbance zone until the qualified biologist has confirmed that any young birds have fledged and are able to function outside the nest location. Required setback distances for the no-disturbance zone shall be based on input received from the California Department of Fish and Wildlife (CDFW) and may vary depending on species and sensitivity to disturbance. As necessary, the no-disturbance zone shall be fenced with temporary orange construction fencing if construction is to be initiated on the remainder of the development site.<br>▪ A report of findings shall be prepared by the qualified biologist and submitted to the Los Altos School District (LASD) for review and approval prior to initiation of construction within the no-disturbance zone during the nesting season (February through August). The report either shall confirm absence of any active nests or shall confirm that any young within a designated no-disturbance zone have fledged and construction can proceed.<br><br>The combination of the above measures would reduce this potential impact to less than significant. | |
| **Cultural Resources** | | | |
| CULT-1: The project could cause a substantial adverse change in the significance of an archaeological resource pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15064.5. | PS | CULT-1: The following measures shall be implemented:<br><br>a) During the first construction tailgate safety meeting, the project construction site superintendent shall remind all project personnel that they are legally required to stop work and notify their supervisor if they believe that they have unearthed archaeological artifacts. The construction superintendent shall similarly instruct all new construction personnel who arrive on the project site after the initial tailgate safety meeting.<br><br>b) If evidence of any subsurface archaeological features or deposits is discovered during construction-related earth-moving activities (e.g., lithic scatters, midden soils, historic era farming or construction materials), all ground-disturbing activity in the area of the discovery shall be halted within 25 feet of the find until a qualified archaeologist and Native American representative from a traditionally and culturally affiliated tribe, as appropriate, can assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of | LTS |

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**TABLE 2-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

| Impact | Level of Significance Without Mitigation | Mitigation Measure | Level of Significance After Mitigation |
|---|---|---|---|
| | | cultural objects, leaving objects in place within the landscape, and/or returning objects to a location within the project area where they will not be subject to future impacts.<br><br>c) If, after evaluation, a resource is considered significant, or is considered a tribal cultural resource, all preservation options shall be considered as required by the California Environmental Quality Act (CEQA) (see Public Resources Code Section 21084.3), including possible capping, data recovery, mapping, or avoidance of the resource. Treatment that preserves or restores the cultural character and integrity of a tribal cultural resource may include tribal monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. If artifacts are recovered from significant prehistoric archaeological resources or tribal cultural resources, the first option shall be to transfer the artifacts to an appropriate tribal representative. If possible, accommodations shall be made to re-inter the artifacts at the project site. Only if no other options are available will recovered Native American archaeological material be housed at a qualified curation facility. The results of the identification, evaluation, and/or data recovery program for any unanticipated discoveries shall be presented in a professional-quality report that details all methods and findings, evaluates the nature and significance of the resources, analyzes and interprets the results, and distributes this information to the public.<br><br>The combination of the above measures would reduce this impact to less than significant. | |
| CULT-2: The project could disturb human remains, including those interred outside of formal cemeteries. | PS | CULT-2: Construction work shall immediately be halted if human remains are discovered, and applicable Provisions of the California Health and Safety Code Section 7050.5 shall be implemented. If human remains are accidentally discovered during project construction activities, the requirements of California Health and Safety Code Section 7050.5 shall be followed. Potentially damaging excavation shall halt on the project site within a minimum radius of 100 feet of the remains, and the county coroner shall be notified. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (California Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (California Health and Safety Code Section 7050[c]). Pursuant to the provisions of Public Resources Code Section 5097.98, the NAHC shall identify a Most Likely Descendent (MLD). The MLD designated by NAHC shall have at least 48 hours to inspect the site and propose treatment and disposition of the remains and any associated grave goods. The Los Altos School District (LASD) shall work with the MLD to ensure that the remains are removed to a protected location and treated with | LTS |

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## TABLE 2-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

| Impact | Level of Significance Without Mitigation | Mitigation Measure | Level of Significance After Mitigation |
|---|---|---|---|
| | | dignity and respect. Native American human remains may also be determined to be tribal cultural resources. The county coroner shall contend with the human remains if they are not of Native American origin. Adherence to these procedures and provisions of the California Health and Safety Code would reduce potential impacts on human remains less than significant. | |
| **Energy** | | | |
| *The project would have no potentially significant energy impacts.* | | | |
| **Geology and Soils** | | | |
| GEO-1: The project could directly or indirectly destroy a unique paleontological resource or site. | PS | GEO-1: Before the start of any excavation activities, the Los Altos School District (LASD) shall retain a qualified paleontologist, as defined by the Society of Vertebrate Paleontology (SVP), who is experienced in training construction personnel regarding paleontological resources. The qualified paleontologist shall train all construction personnel who are involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils that could be seen during construction, and proper notification procedures should fossils be encountered. Should any paleontological resources be encountered during construction activities, all ground-disturbing activities within 50 feet of the find shall be ceased and LASD shall be notified immediately. LASD shall immediately notify the qualified paleontologist and request that they assess the situation based on SVP standards, consult with agencies as appropriate, and make recommendations for the treatment of the discovery if found to be significant. If construction activities cannot avoid a significant paleontological resource, the qualified paleontologist shall salvage the paleontological resource and recommend additional measures (as needed) to minimize adverse effects on paleontological resources. Additional measures may include on-site monitoring by the qualified paleontologist of future excavation activities; identification, cataloging, curation, and provision for repository storage of prepared fossil specimens; preparation of a technical report on the finds and their significance; and provision of the salvaged fossil material and technical report to a paleontological repository, such as the University of California Museum of Paleontology. Public educational outreach may also be appropriate. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to LASD for review. The above measures shall be included in contract specifications. | LTS |

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

## TABLE 2-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

| Impact | Level of Significance Without Mitigation | Mitigation Measure | Level of Significance After Mitigation |
|---|---|---|---|
| **Greenhouse Gas Emissions** | | | |
| *The project would have no potentially significant greenhouse gas emissions impacts.* | | | |
| **Hazards and Hazardous Materials** | | | |
| *The project would have no potentially significant hazards and hazardous materials impacts.* | | | |
| **Hydrology and Water Quality** | | | |
| HYDRO-1: Stormwater runoff from the future park site during the period following construction of the school campus and prior to construction of the park could contribute to the degradation of water quality. | PS | HYDRO-1: The temporary stormwater drainage system that would be installed inside the edge of the future park site to capture runoff from the park site shall include a temporary stormwater treatment system such as a bio-retention treatment area to ensure that runoff from the future park site would not degrade water quality prior to construction of the future park. The Los Altos School District (LASD) shall be responsible for the inspection and maintenance of this temporary stormwater treatment system until the future park site is conveyed to the City of Mountain View by LASD, at which time inspection and maintenance of this temporary stormwater treatment system shall become the responsibility of the City. The design and maintenance of the temporary stormwater drainage system shall be included in the stormwater management plan to be submitted to the City for review and approval prior to the City issuing the permits that would allow proposed stormwater drainage systems to connect to the City's existing stormwater drainage system. | LTS |
| HYDRO-2: Removal of existing on-site storm drain systems that capture and convey runoff from off-site areas could result in localized flooding on the project site and southern adjacent areas if new off-site storm drain systems are not yet installed. | PS | HYDRO-2: The Los Altos School District (LASD) shall coordinate with the owner of the property adjacent to the south of the project site regarding the design and timing for construction of the project and the new off-site storm drain system improvements to ensure that the new off-site storm drain system would be installed prior to the removal of the existing storm drains on the project site that capture runoff from off-site areas. If the installation of new off-site storm drain systems would not be completed prior to the removal of the existing storm drains on the project site that capture runoff from the off-site area south of the project, the project shall incorporate additional storm water capture and treatment systems along its southern boundary into the project design and construction in order to manage stormwater runoff from this off-site area. | LTS |
| **Land Use** | | | |
| *The project would have no potentially significant land use impacts.* | | | |

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

## TABLE 2-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

| Impact | Level of Significance Without Mitigation | Mitigation Measure | Level of Significance After Mitigation |
|---|---|---|---|
| **Noise** | | | |
| *The project would have no potentially significant noise impacts.* | | | |
| **Public Services** | | | |
| *The project would have no potentially significant public services impacts.* | | | |
| **Recreation** | | | |
| *The project would have no potentially significant recreation impacts.* | | | |
| **Transportation** | | | |
| *The project would have no potentially significant transportation impacts.* | | | |
| **Tribal Cultural Resources** | | | |
| TRIBAL-1: The project could cause a substantial adverse change in the significance of as-yet unknown tribal cultural resources. | PS | TRIBAL-1: The Los Altos School District (LASD) shall implement Mitigation Measures CULT-1 and CULT-2. | LTS |
| **Utilities and Service Systems** | | | |
| *The project would have no potentially significant utilities and service systems impacts.* | | | |

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

# 3. PROJECT DESCRIPTION

## 3.1 INTRODUCTION

This Environmental Impact Report (EIR) addresses the proposal for a new Los Altos School District (LASD) Site No. 10 School project (project), a proposal for a new school to be located on an 11.7-acre site at the San Antonio Center shopping center in Mountain View. The 11.7-acre project site has been owned by LASD since 2019. Existing commercial buildings would be demolished and a new two-story school that could serve up to 900 students would be developed, along with playfields, parking areas, and hardscape. A 2.2-acre corner of the 11.7-acre project site would be conveyed to the City of Mountain View (City) for a future neighborhood park. Access to the project site would be from Pacchetti Way at the northwest end of the site. California Street and Showers Drive are two main roads serving the site, as shown in the aerial view in **Figure 3-1.**

The proposed new school responds to increasing enrollment driven by young families moving into new housing in Mountain View. By partnering with the City, LASD is planning for the proposed playfields, playground, black top, and other areas on the site to be available to the community before and after school and beyond the ages of children enrolled in the school.

For purposes of the analysis in this EIR, it is assumed that “existing conditions” (or “baseline conditions”) are the conditions that existed on the project site at the time the Notice of Preparation (NOP) for the EIR was issued.

## 3.2 PROJECT CHARACTERISTICS

### PROPOSED SCHOOL GRADE LEVELS AND STUDENT ENROLLMENT

The proposed new school would be LASD’s tenth school campus. With the project, LASD would develop a campus that may serve a range of grades and student populations over time. As LASD is a Kindergarten through eighth grade (K-8) district, the only format that is ruled out is high school. The site could serve as a K-5 or even a K-2 school, or possibly a K-6 or K-8 school. It is also possible that it may change in time to a 6-8 middle school. It is also not unusual for LASD to lease facilities to private preschool operators, usually located in or near the Kindergarten or transitional Kindergarten area. The proposed facilities are planned for change and expansion, and would include a library, administration space, and multi-purpose infrastructure that could serve up to 900 students. This EIR evaluates a maximum on-site population of 900 students.


Figure 3-1

**AERIAL OF EXISTING SITE**

SOURCES: Google Earth, 2020; LASD, 2022

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## PROPOSED SITE DESIGN, DEMOLITION, AND CONSTRUCTION

The proposed site plan is shown in **Figure 3-2,** and a three-dimensional (3D) image of the proposed plan for the project site is shown in **Figure 3-3.** The proposed quadrangle design would allow the school buildings and outdoor gathering and lunch space to be fully secure during the school day. The gym and library would be independently accessible from the perimeter to allow for extended hours for these potential community uses.

The entire 11.7-acre project site would be cleared of its current shopping center uses and all structures and surfaces demolished, except for existing improvements and facilities along Pacchetti Way. All existing buildings would be vacated and demolition of the 137,940 square feet of existing building area, along with removal of existing parking lot surface areas (asphalt, concrete and underlying base rock), would result in about 16,000 tons of potentially recyclable demolition materials and 5,350 tons of construction and demolition debris. Demolition is addressed in more detail below.

Remedial action required to address naturally occurring asbestos (NOA) in soils would include capping of NOA-containing soil with clean imported fill, which may require over-excavation of NOA-containing soils in some areas.[1] This would generate about 17,450 cubic yards of exported soil and 17,450 cubic yards of imported clean soil.

Of the 11.7-acre parcel, 2.2 acres would be transferred from LASD to the City of Mountain View for a future, yet-to-be designed neighborhood park. This would leave LASD with a 9.5-acre parcel for the new school. A small portion of the parcel includes an easement for the existing privately owned Pacchetti Way.

**Table 3-1** provides an overview of the project and the proposed changes compared to existing conditions, and **Figures 3-4** and **3-5** show the proposed one- and two-story school buildings. As shown, the proposed new buildings would provide about 89,570 new square feet of development. The maximum height of the two-story buildings would be 38 feet.

### Proposed Landscaped and Playfield Areas

All existing trees on the site would be removed and new landscaping would be added for the school campus.[2] About 1.2 acres of landscaped areas would be developed. It is estimated that about 100 new trees would be planted to replace the 150 existing trees that would be removed.

About 3.26 acres of the 9.5-acre school site would be developed for active use playfields. These playfields may be lit at night.

---

[1] Clearing of the entire site, including the 2.2 acres to be conveyed to the City for a future park, is evaluated in this EIR. No other elements of the potential future City park are evaluated in the EIR, although the EIR does address the potential park in the cumulative impact analysis for each environmental topic, at a generalized level of detail.

[2] It is not known if the trees on the 2.2-acre parcel to be conveyed to the City of Mountain View would be saved. This area would be cleared of existing paving.

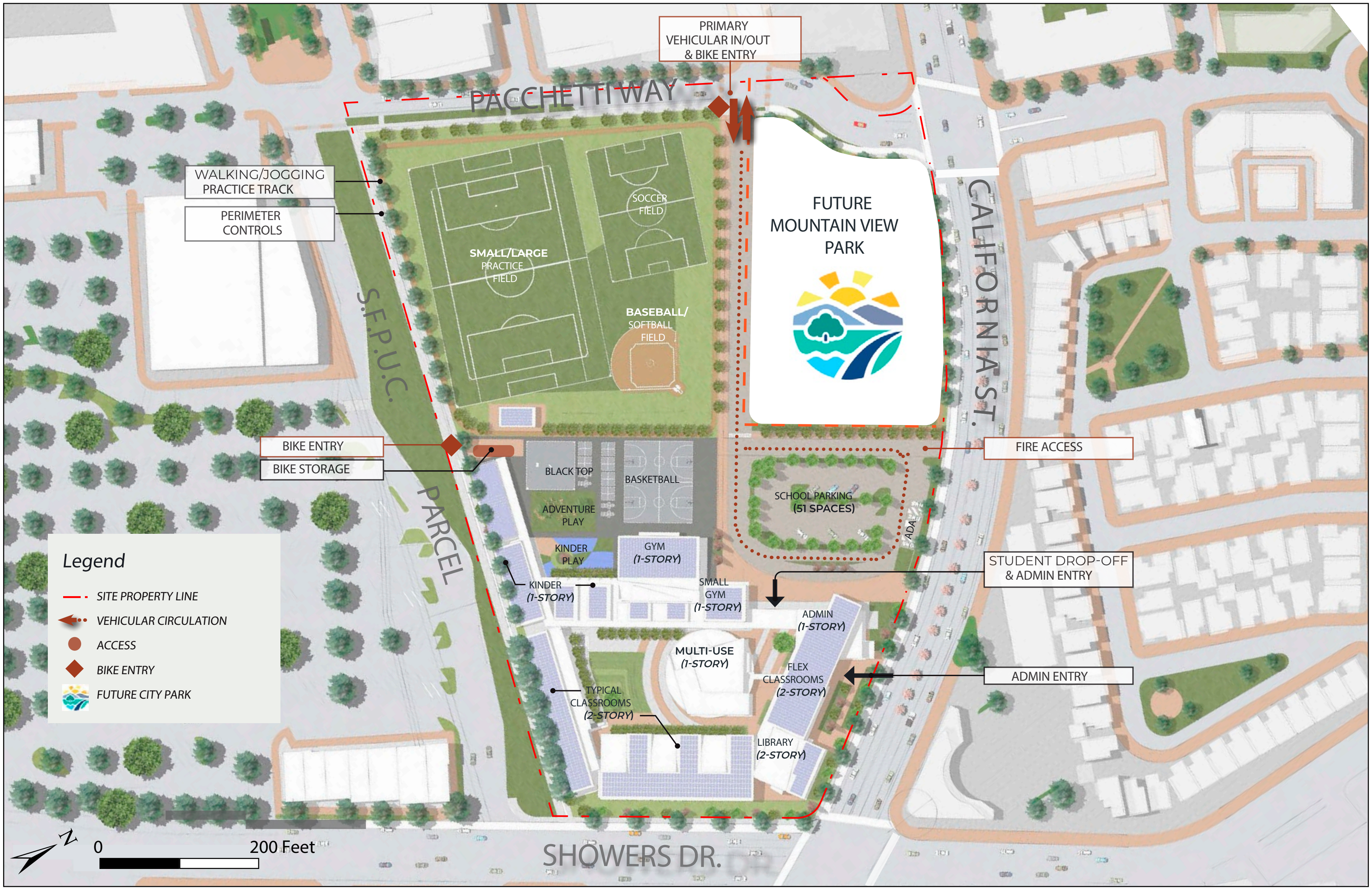


Figure 3-2

**PROJECT SITE PLAN**

SOURCE: Gelfand Partners Architects, 2024

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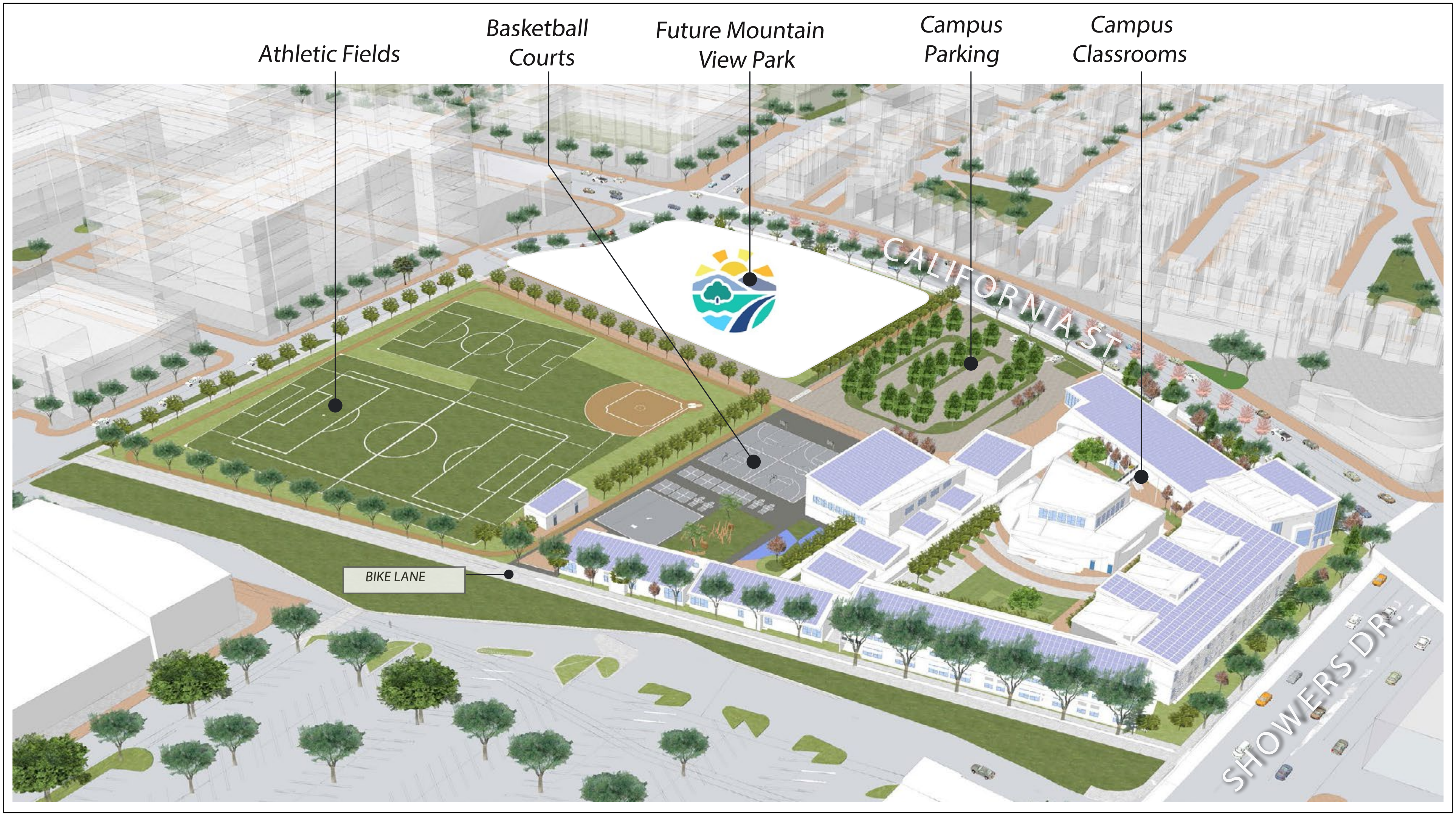


Figure 3-3

**3D VIEW OF PROJECT**

SOURCE: Gelfand Partners Architects, 2024

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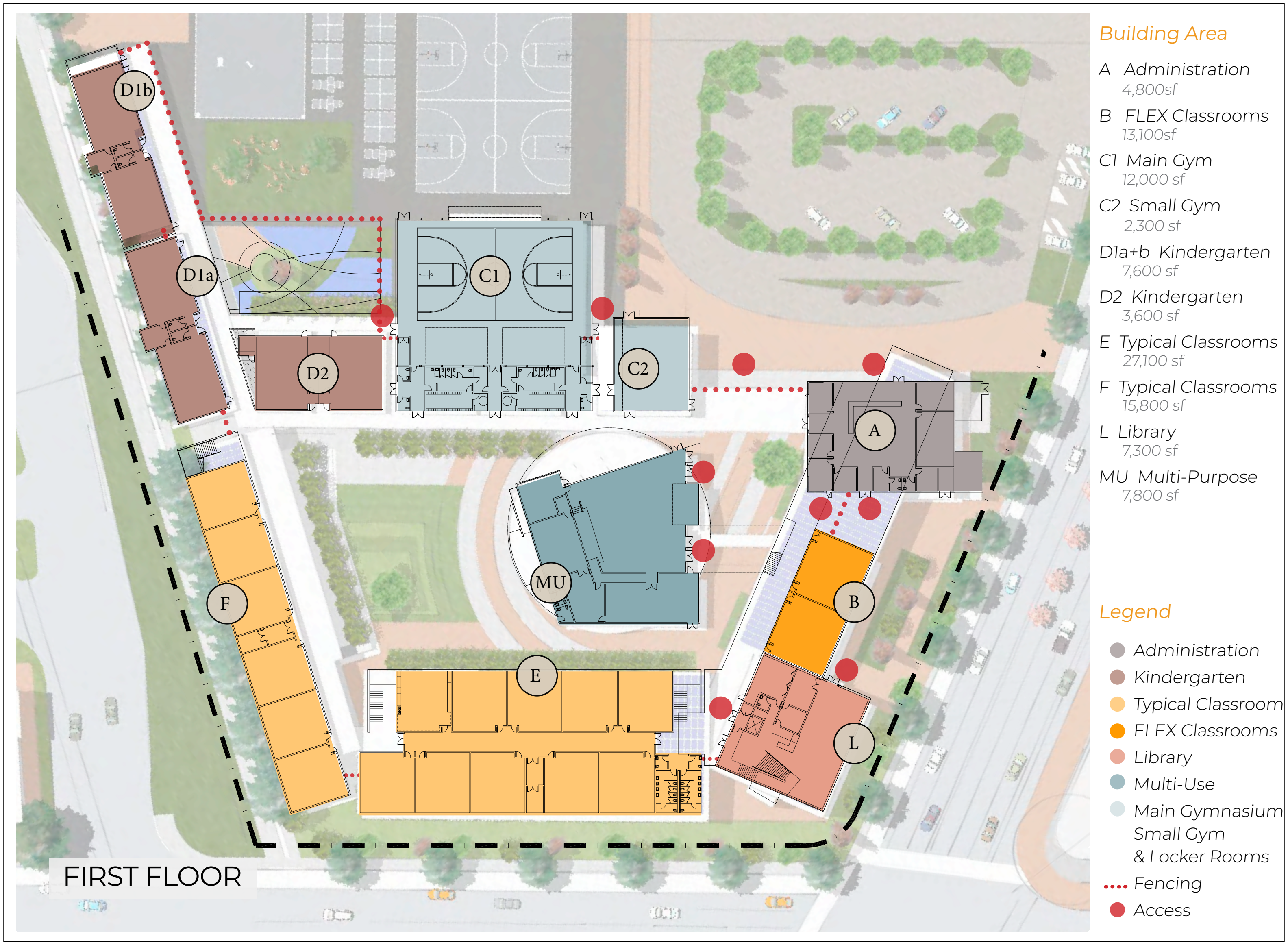


Figure 3-4

SOURCE: Gelfand Partners Architects, 2022

**SCHOOL SITE PLAN - FIRST FLOOR**

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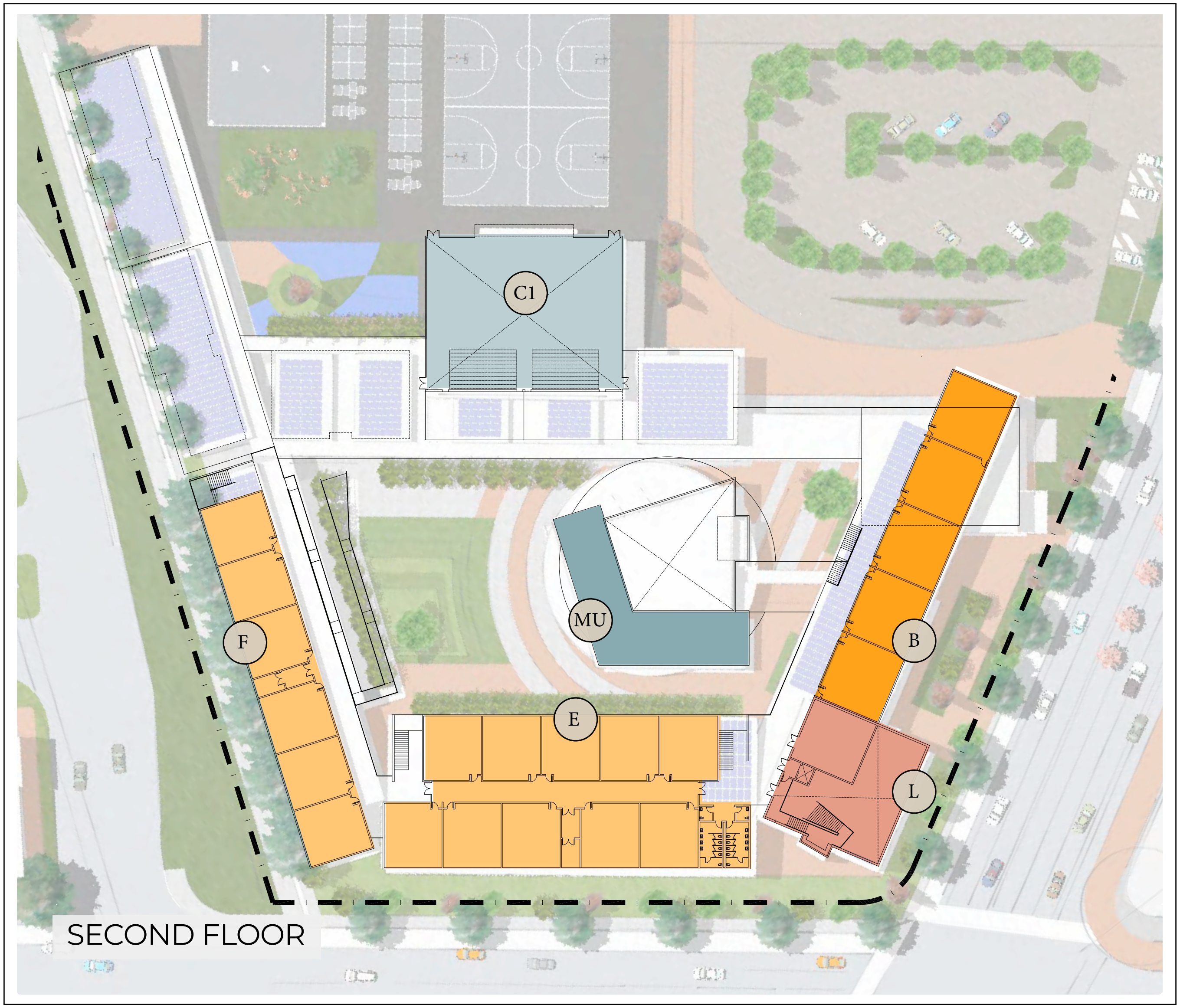


SOURCE: Gelfand Partners Architects, 2022

Figure 3-5

**SCHOOL SITE PLAN - SECOND FLOOR**

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**TABLE 3-1 SUMMARY OF PROPOSED CHANGES IN ON-SITE BUILDINGS, LANDSCAPING, AND PARKING**

| Element | Existing | Proposed | Net Gain/Loss |
|---|---|---|---|
| Footprint of Existing Commercial Buildings | 137,940 SF (3.17 acres) | 0 SF | -137,940 SF (-3.17 acres) |
| Total Footprint of Proposed School Campus Buildings, Fields, Parking on 9.5-Acre School Site | 0 acres | 8.97 acres | +8.97 acres |
| Footprint of Proposed School Buildings Only[a] (Including Area of Disturbance) | 0 SF | 82,000 SF | +82,000 SF |
| Maximum Building Height | 2-story (about 40 feet) | 2-story (maximum of 38 feet) | Minor reduction in height |
| Landscaped Pervious Surface Areas | 0.72 acre | 1.2 acres | +0.48 acre |
| Impervious Surfaces (Includes Artificial Turf on Playfields) | 8.8 acres | 8.3 acres | -0.5 acre |
| Total School Acreage (Includes Pacchetti Way Easement) | 0 | 9.5 acres | +9.5 acres |
| Trees | (±) 150 | (±) 100 | -50 |
| Active Use Playfields (Impervious) | 0 SF | 3.26 acres | +3.26 acres |
| Parking | 461 spaces | 51 spaces | -410 spaces |

Notes: Acreages and square footages are approximate. SF = square feet.
[a] The footprint of the proposed school buildings (82,000 SF) is included in the total footprint of the school campus (390,742 SF or 8.97 acres). Some school buildings would be two stories (see Figure 3-4). The total square footage of new school buildings would be about 89,570 SF.
Source: LASD, 2023.

With the new playfield and landscaped areas and removal of existing parking and buildings, it is estimated that the amount of impervious surface area at the school site would be reduced by about 0.5 acre (see Table 3-1). Currently, the project site is entirely impervious with the exception of the on-site trees. The new school campus would remove a large percentage of this impervious area and replace it with playfields and landscaped areas, resulting in reduced runoff from the site, which is addressed in *Section 4.9, Hydrology and Water Quality*, of this EIR.

## Proposed Building Layout and Design

Classroom buildings would be clustered at the southeast edge of the project site (see Figure 3-4). The Multi-Purpose Building (7,800 square feet) would be central to the cluster of the buildings. The Science, Technology, Engineering, and Mathematics (STEM) building (13,100 square feet) (labeled as Building B or FLEX Classrooms in Figure 3-4) and Library (7,300 square feet) would be at the eastern edge of the campus near the corner of California Street and Showers Drive (see Figure 3-4). Administrative space (4,800 square feet) would be in one building just north of the FLEX classrooms adjacent to the exit onto California Street. Kindergarten buildings (see D1 and D2 in Figure 3-4) would be at the southern edge of the site, adjacent to the proposed gymnasium (12,000 square feet). A small gym (2,300 square feet) is proposed as a bid alternate in case LASD decides to have the project bid with or without this small gym. Buildings E and F (see Figure 3-4) would contain additional classrooms.

Typical cross-sections of classroom buildings are shown in **Figure 3-6**. As can be seen, most of the classrooms would be two-story buildings with the upper stories having sloping roofs and clerestory windows for good lighting. The proposed design with overhangs for the classrooms is intended to let winter sunlight enter the buildings while blocking summer sunlight to reduce heat gain. A rendering of the proposed Library is shown in **Figure 3-7** and building elevations are shown in **Figure 3-8.**

### Future City Park

The project provides for a 2.2-acre park that would be owned and maintained by the City of Mountain View and located at the far northwest corner of the site adjacent to Pacchetti Way. The City has not completed a design or identified the facilities that would be located in this area; therefore, this EIR addresses the potential park in the cumulative impact analysis for each environmental topic, at a generalized level of detail. It is assumed that this neighborhood park would primarily be used during daytime hours and that parking for park users would be provided adjacent to the park. The future City park portion of the project site would be covered with a layer of aggregate base material following construction of the school campus and until the park is developed by the City.

## PROJECT TIMING AND CONSTRUCTION

Construction documents for the project are expected to be completed by the end of the second quarter of 2025 and approval by the California Division of the State Architect (DSA) is expected by the end of the first quarter of 2026. Demolition and grading could begin as early as the fourth quarter of 2026 and would take about 3 months. Construction would then continue for 18 to 24 months. Phasing would be planned around the following major construction activities:

- Site clearing, demolition, and rough grading
- Installation and rerouting of on-site utilities
- Off-site utilities and right-of-way improvements, as needed
- Building construction
- Construction of joint use play fields and hard surfaces
- Landscaping

Construction staging (equipment storage, etc.) would occur on the project site. Traditional construction equipment such as bulldozers, cranes, and temporary buildings (trailers for contractors) would be on the site (Gelfand, 2022).

It is estimated that a typical end-dump truck would haul 14 tons of off-haul; thus, there would be about 1,143 loads going to the Stevens Creek Quarry for the recyclable materials and 382 loads going to the Zanker Road Landfill for disposal. During demolition, there would be three to four employees working at the site. An additional 3,500 truck trips would be associated with export and import of soil at the site.

Project containment fencing would be placed around the entire area subject to demolition, renovation, and new construction. Construction access to the site would generally be limited to the hours of construction as allowed by the City. However, there may be times when deadlines must be met, and work may occur outside of these limited hours. Prior to any work outside of these

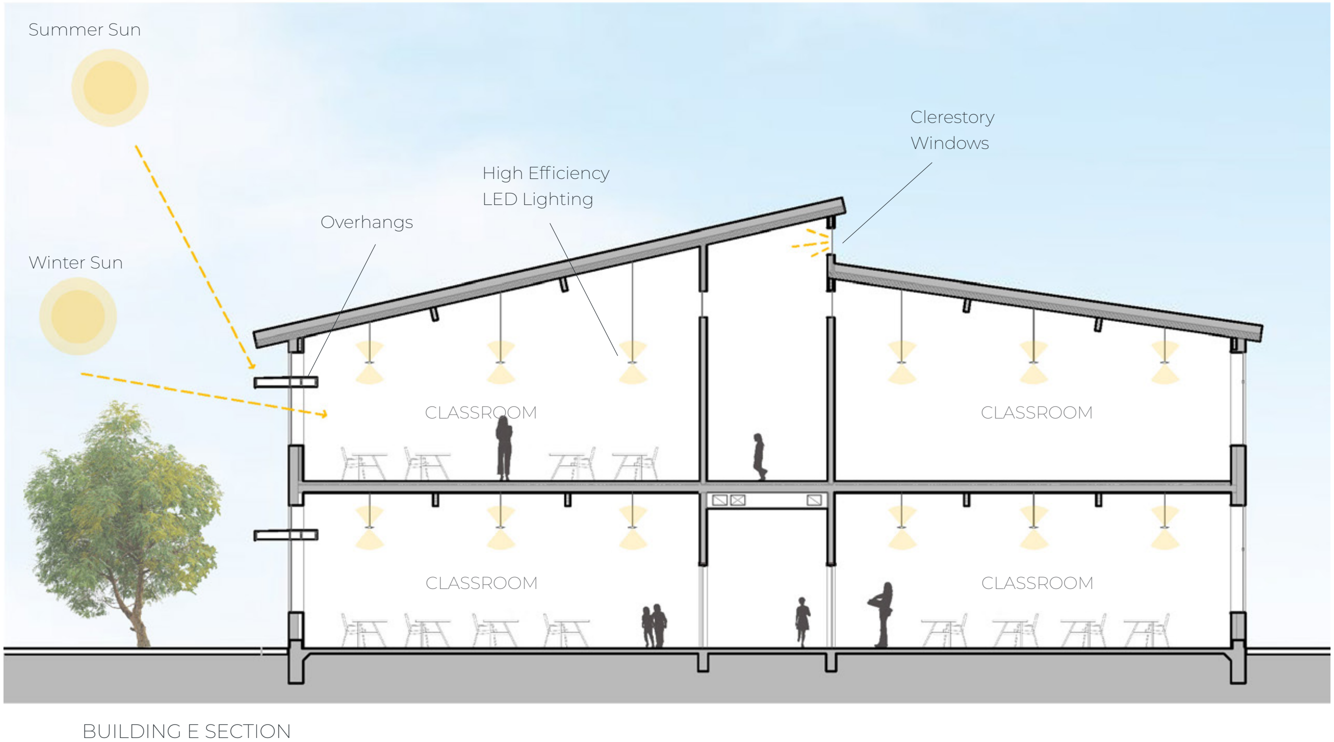



Figure3-6

**BUILDING E AND F CROSS SECTIONS**

SOURCE: Gelfand Partners Architects, 2022


SOURCE: Gelfand Partners Architects, 2022

Figure 3-7

**RENDERING OF PROPOSED LIBRARY**

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CALIFORNIA ST. ELEVATION

SHOWERS DR. ELEVATION

SOURCE: Gelfand Partners Architects, 2022

Figure 3-8

**BUILDING ELEVATIONS**

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construction hours, LASD's board would adopt a resolution rendering the City's ordinance inapplicable and provide the proper notice to the City within the time frame set forth in Government Code Section 53094.

## SITE GRADING AND DRAINAGE

The project site is relatively level, with elevations ranging from about 107 feet above mean sea level (msl) to 175 feet above msl. Maximum depth of excavations will be determined once structural aspects and building foundation type are refined and loads are calculated.

For drainage on the campus, LASD proposes a combination of rapid drainage from roofs and some paved areas, and on-site detention. On-site detention would occur by way of biofiltration/ bioretention areas as a means to reduce peak flow runoff from the site and to prevent any on-site ponding of water.

In addition to the new building construction, about 12,900 gross square feet of asphalt play surface would be constructed. As noted earlier, the overall area of impervious surface (i.e., area that does not allow water to percolate through to the ground) on the project site would decrease by about 0.5 acre. The decrease does not include potential future reductions in impervious area due to development of the City park.

## UTILITIES AND EASEMENTS

On-site and off-site utilities serving the project would include water, wastewater, electrical and gas lines, telecommunications, and internet service. In addition, the project would provide solid waste removal facilities.

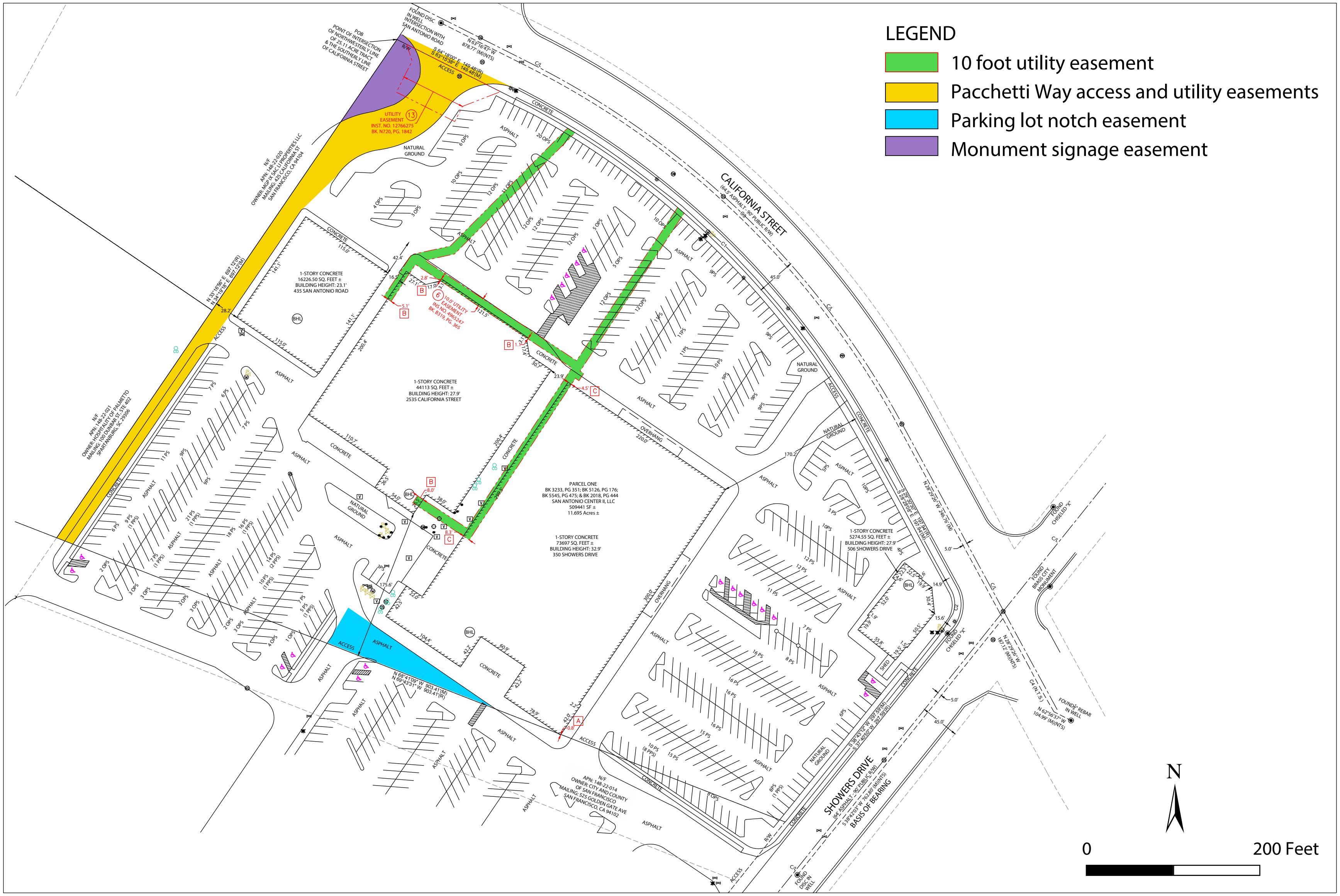
### On-Site Utilities and Easements

Existing easements on the project site are as follows (LASD and Brookfield Properties Village Residences, 2019):

- Easements granted by LASD in favor of adjacent properties (see **Figure 3-9**):
    1. Utility Easement (part of easement area is identical to Pacchetti Way Access Easement)
    2. Monument Sign Easement
    3. Pacchetti Way Access Easement
    4. Parking Lot Notch Easement[3]

Existing water, sewer, electrical and natural gas lines located on the project site would likely require rerouting to serve the new buildings. The existing 10-foot easements for utility providers (see Figure 3-9) would be cleared from the property before construction. Telecommunication lines would also have to be installed to serve the new buildings. Stormwater management is addressed above under "Site Grading and Drainage."

[3] LASD is working with Federal Realty to remove the "Notch Easement" (see Figure 3-9) ahead of project construction.




SOURCE: Alta, 2022

Figure 3-9

## EXISTING BUILDINGS AND EASEMENTS

### Off-Site Utilities and Easements

The parcel of land adjacent to and contiguous with the southern property line of the project site is owned by the City and County of San Francisco and contains a large-diameter transmission line that is part of the Hetch Hetchy regional water system (see Figures 3-2 and 3-9). The pipeline is owned and operated by the San Francisco Public Utilities Commission (SFPUC). Federal Realty Investment Trust holds an easement for use of the surface of this parcel, which is currently a parking lot serving the western portion of the San Antonio Center shopping center.

## LANDSCAPING AND LIGHTING

New landscaping would include new trees to be planted at the site's edge adjacent to California Street and Showers Drive. Additional trees would likely be planted in school courtyards and at edges of buildings; however, a landscape plan has not been developed. Trees would also be planted at the northwest edge of the site adjacent to Pacchetti Way. Shrubbery would also be added to the campus, and large expanses of artificial turf would be provided for the soccer field and the baseball/softball field (see Figure 3-2). A campus garden is proposed for the southern edge of the site near the Kindergarten classrooms. It is assumed that additional landscaping would be provided in the 2.2-acre future park that the City would develop.

Lighting would be provided throughout the exterior portions of the campus for pathways and parking areas. It is assumed for this evaluation that the two playing fields would contain some lighting, likely Musco lighting fixtures on 70-foot-tall poles. *Section 4.1, Aesthetics,* of this EIR assesses this field lighting. Some lighting is assumed to be attached to exterior walls of buildings, especially at entrance locations. Pathway lighting would be low and directed along the paths of travel.

## ENERGY CONSERVATION

LASD has adopted the Collaborative for High Performance Schools (CHPS, 2021) criteria for minimizing energy use. In addition, LASD has a 2030 Zero Net Energy (ZNE) goal in conformance with California policy. The project would meet energy usage intensity standards consistent with ZNE goals and would add solar panels as conditions permit to achieve the ZNE goals for the campus (Gelfand, 2022). The project would be all-electric, would-achieve net zero via a combination of on-site renewables and purchase of green power, and would comply with California Green Building Standards Code (CALGreen) Tier 2 electric vehicle (EV) charging requirements.

## HOURS OF OPERATION

The new school would generally operate from 8:00 AM to 3:00 PM. After-hours sports events would likely take place into the early evening. Teachers may arrive as early as 7:00 AM and leave after 3:00 PM. Office hours would generally be 7:30 AM to 4:30 PM.

## CIRCULATION AND PARKING

Vehicular, pedestrian, and bicycle circulation and emergency access are shown in **Figure 3-10.** As shown, the main vehicular entrance to the campus would be from Pacchetti Way. Pedestrian access would be located throughout the campus as shown in Figure 3-10 and is discussed under "Bicycle and Pedestrian Access" below. The student drop-off location would be adjacent to the proposed small gym.

The project site currently contains a total of about 461 parking spaces to serve the commercial operations on the site. These spaces would all be removed and about 51 new parking spaces would be created at the center of the site, just east of the future City park and near the student drop-off location by the proposed Administration Building. The 51 spaces would be located together in a surface lot, with a clearly defined one-way flow. Four of the spaces would be handicapped-accessible (under the Americans with Disabilities Act [ADA]). The site would be laid out to allow overflow event parking on the blacktop playground adjacent to the parking area.

## LASD BUS AND VAN SERVICE

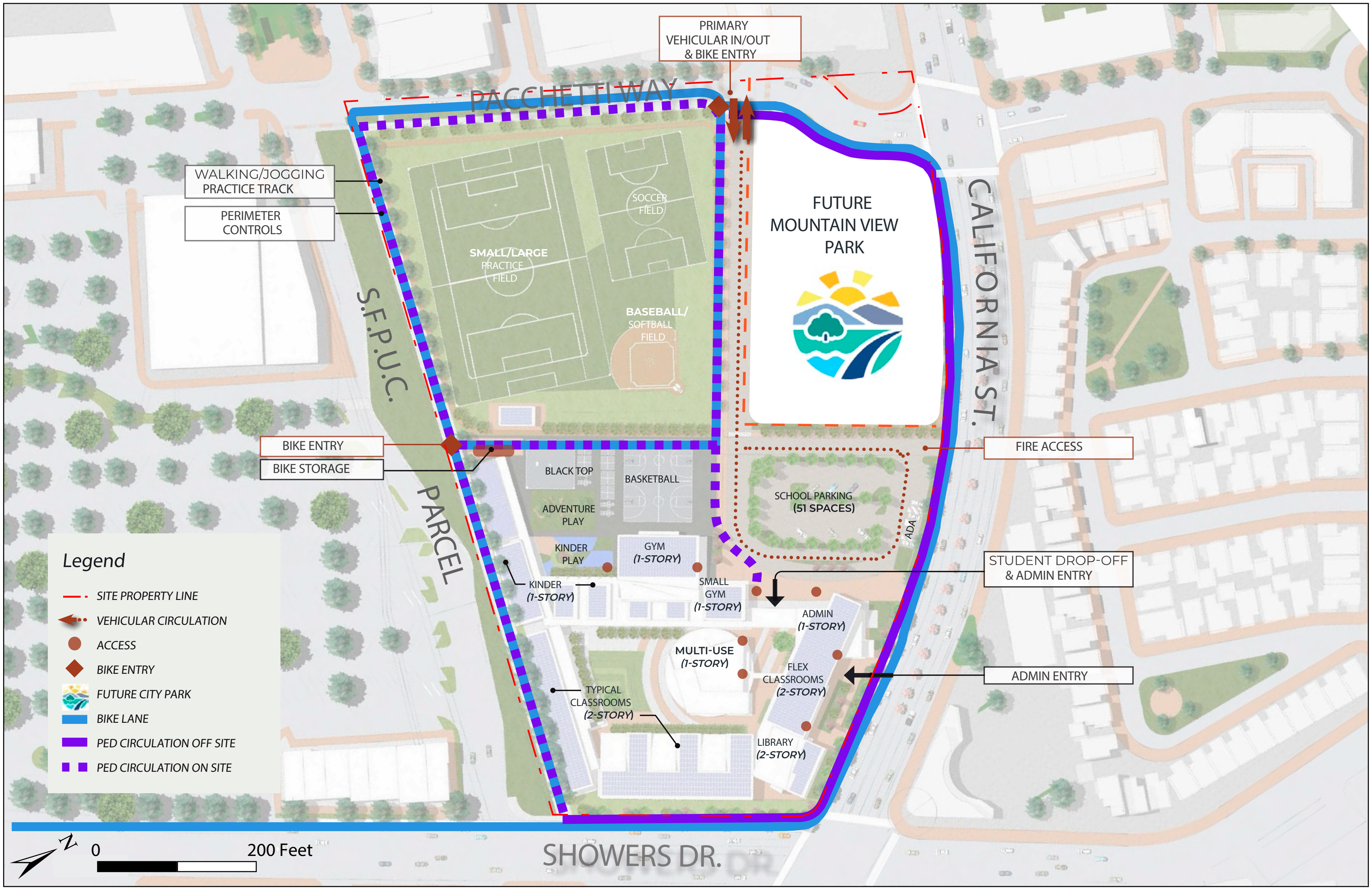
Currently, LASD provides bus service only to special education students. Service for all students may be provided in the future if necessary or if required by State of California law.

## BICYCLE AND PEDESTRIAN ACCESS

The main school entrance would be located at the northwest end of the Administration Building. Bicycle access would be available via two main entry points to the campus: (1) at the campus driveway connected to Pacchetti Way, and (2) via the bike lane along the southern edge of the campus and the gated bike entry between the school buildings and the joint use fields (see Figure 3-10). Bicycle parking would be located on the western side of the blacktop. Pedestrian access would be available to the campus from multiple locations at the northeast and west. Fencing would enclose the perimeter of the campus so that pedestrian entry points would be limited. During non-school hours, access would be made available to joint use fields and the gym, but not to the core campus, except for certain events (such as back-to-school nights).

## EMERGENCY ACCESS AND SITE SECURITY

Fire truck access to the campus would be available from California Street and Pacchetti Way. Site security would include perimeter fencing as described under "Bicycle and Pedestrian Access" above. Central courtyards and principal building entries would be separated from exterior streets by closable fencing and gates.




SOURCE: Gelfand Partners Architects, 2024

Figure 3-10

**CIRCULATION AND ACCESS**

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## 3.3 PROJECT OBJECTIVES

LASD is committed to upgrading its facilities in compliance with the 2014 passage of Measure N, a $150-million Proposition 39 facilities bond. The following objectives have been identified for the project:

- To address increasing enrollment while providing students and faculty with a learning environment that reflects the LASD Facilities Master Plan (LASD, 2022).
- To provide an innovative and engaging learning experience that fosters development of the "whole child" and ensures that all students are well prepared to succeed in the 21st century.
- To meet the intent of the LASD Facilities Master Plan (LASD, 2022) and to provide a new school in a location that fosters walking and biking by nearby families.
- To provide a site plan that allows for flexibility in the grades to be accommodated and that provides space for up to 900 students over time.
- To create facilities that have the capacity for both current and future projected enrollment.
- To provide buildings that can easily be modified to serve different grade levels, depending on LASD needs over time.
- To provide campus buildings that meet all fire safety requirements, Americans with Disabilities Act (ADA) requirements, energy conservation goals, seismic safety requirements, and campus security needs as required by the Division of the State Architect.
- To incorporate environmental principles into the project design, such as energy conservation measures and the use of on-site bioretention for site runoff.
- To maximize play areas while also allowing adequate space for needed classrooms.

In addition to the above educational objectives, LASD is committed to the continuing collaboration with the City of Mountain View in master planning and programming the joint use facilities, and jointly designing and implementing traffic safety improvements for the mobility benefit of the public at large and future students at the new school. A shared goal is to effectively integrate the new school into the fabric of the neighborhood and the City's multimodal transportation systems.

## 3.4 REFERENCES

Collaborative for High Performance Schools (CHPS), 2022. Website: https://chps.net/chps-verified, accessed July 22, 2022.

Gelfand, Lisa, Gelfand Partners Architects, 2022. Personal communication with A. Skewes-Cox, July 22, 2022.

Los Altos School District (LASD) and Brookfield Properties Village Residences, 2019. Easement Agreement-Part 1 (Utilities, Drainage and Signage Easements) between the Los Altos School District and Brookfield Properties Village Residences, and Part 2 (Access Easement Agreement) between the Los Altos School District and MGP IX SAC II Properties, LLC.; recorded by the County of Santa Clara on December 12.

Los Altos School District (LASD), 2022. Facilities Master Plan (Draft).

# 4. ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

This chapter of the Draft Environmental Impact Report (EIR) addresses project-related impacts within the following 16 topic categories:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

Each of the 16 topic sections in this chapter presents information in five subsections, as follows:

- **Introduction.** This subsection addresses the overall issues covered for the topic and the approach used in the analysis.
- **Environmental Setting**. This subsection briefly describes elements of the environmental setting relevant to a discussion of project impacts in the topic category.
- **Regulatory Framework**. This subsection describes federal, state, and local regulations applicable to the topic.
- **Environmental Impacts and Mitigation Measures**. This subsection identifies potential impacts based on the identified significance criteria. Potentially significant impacts are numbered and summarized in **bolded** text, followed by text that describes the impact in more detail. Mitigation measures (indented text) that can reduce such impacts follow this discussion; these measures are labeled with a number that corresponds to the number of the impact. A code indicating the level of significance of each impact before and after mitigation follows the bolded impact statements and mitigation measures. The code "PS" stands for "potentially significant" and "LTS" stands for "less than significant." The code "SU" stands for "significant and unavoidable."
- **References.** This subsection lists reference materials used in preparing the analysis.

The following topics specified in Appendix G of the California Environmental Quality Act (CEQA) Guidelines are not addressed further in the Draft EIR, for the following reasons:

- **Agriculture and Forestry Resources and Mineral Resources.** The topics of agriculture and forestry resources and mineral resources would not apply, given the urbanized nature of the project site.
- **Population and Housing.** The topic of population and housing is not discussed because the project would not displace substantial numbers of people or any housing and would not induce substantial unplanned population growth. Growth-inducing impacts are addressed in *Chapter 6, Other CEQA Considerations.*
- **Wildfire.** The wildfire topic is not addressed in its own section of the Draft EIR because the criteria listed in CEQA Guidelines Appendix G (Section XX, Wildfire) do not apply, given that the project site is not located in or near State Responsibility Areas or lands classified as Very High Fire Hazard Severity Zones. However, wildfire issues are addressed in *Section 4.8, Hazards and Hazardous Materials*, of the EIR.

# 4.1 AESTHETICS

## INTRODUCTION

This section discusses the existing visual conditions at the project site and vicinity and addresses the potential aesthetic impacts of the proposed project. The potential impacts relate to the possibility of increased light and glare, the visual compatibility of the proposed development with surroundings, and the potential impacts on viewsheds with an emphasis on public viewing locations. This visual impact analysis is based on field observations at the project site and vicinity in March 2023.

## ENVIRONMENTAL SETTING

### Regional and Local Setting

The project site is located within a developed commercial area that is located at the north end of the City of Mountain View and referred to as the San Antonio Precise Plan area. The main roads serving the site are California Street and Showers Drive, and these two roads provide the primary views for the public into the center of the site. Views out to distant areas are limited due to Mountain View's level topography and the built-up nature of the surroundings, with a number of multi-story buildings recently developed in the San Antonio commercial core. This developed portion of Mountain View includes primarily one-story buildings within the existing shopping center where the project site is located, and large expanses of surface parking.

Nearby development includes two-, three-, and four-story residential areas to the north and northeast; a six-story public parking structure to the west on the west side of Pacchetti Way; one-story commercial uses along California Street to the north; and parking and commercial uses on the west side of Showers Drive across from the project site. The six-story Hyatt Centric Hotel is located west of the public parking garage and has rooms that overlook the project site. The one-story Walmart store is located to the south and is separated from the project site by a large expanse of surface parking spaces, with trees planted throughout this area.

### Views of Project Site

*Views from Showers Drive*

Looking west from Showers Drive, one views the main entrance to the project site in the vicinity of the San Francisco Public Utility Commission (SFPUC) right-of-way (see **Figure 4.1-1A**). This entranceway currently serves the commercial uses at the site, including the parking area for the nearby Walmart. Street trees line Showers Drive at the south end of the site, and commercial uses line the street to the west of the project site as seen in Figure 4.1-1A. These commercial uses would remain.


A. View of Showers Drive site frontage, looking northwest, with main entrance at center of photo. Existing commercial buildings at left would remain. Street trees on right screen view of site where new school would be built.


B. View northeast across site from parking lot adjacent to site entrance. These buildings would be removed for the new school.

Figure 4.1-1

**VIEWS OF SITE FROM SHOWERS DRIVE AND VICINITY**

SOURCE: A. Skewes-Cox, 2023

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*Views from Internal Driveways and Pacchetti Way*

From the internal driveway that provides access to the project site and the Walmart parking area, one looks north toward existing one-story commercial buildings that would be removed for the project (see **Figure 4.1-1B**). Pacchetti Way forms the western boundary of the project site and provides access to the commercial areas from California Street. From Pacchetti Way, one sees the eucalyptus trees that line Pacchetti Way, the large parking areas, and the one-story commercial buildings on the site (see **Figure 4.1-2A**). Closer to California Street, one looks back to the proposed site of a future City of Mountain View park, which is now composed of surface parking area and planted trees (see Figure 4.1-2B).

*Views from California Street*

Sidewalks on both sides of California Street provide views into the project site, across the heavily traveled four-lane roadway. At the corner of California Street and Showers Drive, one looks toward the existing commercial buildings on the northeast corner of the site where the project's proposed school library would be located (see **Figure 4.1-3**). Street trees are also visible at the northeast edge of the site, abutting California Street.

### Light and Glare

Sources of light and glare near and within the project site are primarily vehicles on public roadways, lighting on the exterior of existing commercial buildings, lighting from adjacent residential development, and lighting in parking lots and along public streets. Vehicle headlights on public roadways, on adjacent properties, and on the project site emit temporary lighting in the vehicles' direction of travel. Existing buildings and parking areas on the project site include lighting visible during nighttime hours.

## REGULATORY FRAMEWORK

### Federal and State Regulations

No federal regulations related to visual quality would pertain to the project.

The State of California has a formal program related to scenic highways. The California Scenic Highway Program, established in 1963, identifies and designates certain highways along which adjoining land uses and features require special conservation treatment. The responsibility for the management of a program is left to local cities and counties. Highways shown as "eligible" for listing are believed to have outstanding scenic values. Once a highway is listed in California Streets and Highways Code Sections 263.1 through 263.8, it may be nominated for official designation by the local governing body with jurisdiction over the lands adjacent to the proposed scenic highway. A visual assessment is required, and a number of other steps must be followed. No highways are located in the immediate vicinity of the project site, and none of the roadways in the vicinity are included in the Streets and Highways Code list of eligible highways or are designated a scenic highway (California Department of Transportation, 2023).

A. View across site, looking southeast from Pacchetti Way. Parking area and buildings would be removed. Trees along Pacchetti Way would be retained.

B. View looking southwest across site from corner of Pacchetti Way and California Street towards future City park area. Buildings in background would be removed.

Figure 4.1-2

SOURCE: A. Skewes-Cox, 2023

**VIEWS OF SITE FROM PACCHETTI WAY**

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View northwest across site from intersection of Showers Drive and California Street. All buildings at this corner would be removed and replaced with new school buildings as shown in Figure 3-2.

Figure 4.1-3

SOURCE: A. Skewes-Cox, 2023 **VIEWS OF SITE FROM SHOWERS DRIVE/CALIFORNIA STREET INTERSECTION**

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## Local Regulations and Policies

*City of Mountain View Zoning Code*

The City of Mountain View zoning for the project site is P(40), which is a Planned Community District. Building height, area, and other regulations are imposed as part of a precise plan or as conditions upon the granting of a planned community permit. The San Antonio Precise Plan that applies to the project site is addressed in more detail in *Section 4.10, Land Use*, and briefly below regarding specific policies on urban design.

*City of Mountain View General Plan*

The City of Mountain View General Plan land use designation for the site is "Mixed-Use Center." General Plan policies that would apply to the project and were adopted for the purpose of avoiding or mitigating an environmental impact as related to visual issues include the following (City of Mountain View, 2012):

Policy LUD 3.7: *Upgraded commercial areas.* Encourage the maintenance, enhancement and redevelopment of older commercial districts, shopping centers and corridors.

Policy LUD 6.1: *Neighborhood character.* Ensure that new development in or near residential neighborhoods is compatible with neighborhood character.

Policy LUD 6.3: *Street presence.* Encourage building facades and frontages that create a presence at the street and along interior pedestrian paseos or pathways.

Policy LUD 9.1: *Height and setback transitions.* Ensure that new development includes sensitive height and setback transitions to adjacent structures and surrounding neighborhoods.

Policy LUD 9.3: *Enhanced public space.* Ensure that development enhances public spaces through these measures:

- Encourage strong pedestrian-oriented design with visible, accessible entrances and pathways from the street.
- Encourage pedestrian-scaled design elements such as stoops, canopies and porches.
- Encourage connections to pedestrian and bicycle facilities.
- Locate buildings near the edge of the sidewalk.
- Encourage design compatibility with surrounding uses.
- Locate parking lots to the rear or side of buildings.
- Encourage building articulation and use of special materials to provide visual interest.

- Promote and regulate high-quality sign materials, colors and design that are compatible with site and building design.
- Encourage attractive water-efficient landscaping on the ground level.

Policy LUD 10.7: *Beneficial landscaping options.* Promote landscaping options that conserve water, support the natural environment and provide shade and food.

Policy POS 5.2: *Schools and open space.* Collaborate with the school district on new school development and intensification to accommodate population growth while preserving and protecting public parks and playgrounds.

Policy POS 9.1: *Sustainable design.* Promote sustainable building materials, energy-efficient and water-efficient designs, permeable paving and other low-impact features in new public buildings.

Policy POS 12.1: *Heritage trees***.** Protect trees as an ecological and biological resource.

Policy POS 12.2: *Urban tree canopy.* Increase tree canopy coverage to expand shaded areas, enhance aesthetics and help reduce greenhouse gases.

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

Policy POS 12.5: *Salt-tolerant vegetation.* Promote the use of salt-tolerant vegetation that can use recycled water.

*San Antonio Precise Plan*

The San Antonio Precise Plan was adopted in December 2014 and includes 123 acres at the City of Mountain View western entrance. The project site is located in the central/east portion of the Precise Plan area (see Figure 4.10-3 in *Section 4.10, Land Use*). Relevant policies of the San Antonio Precise Plan that address aesthetics and urban design are the following (City of Mountain View, 2014):

Policy OSUF 1.2: Coordinate publicly-accessible pathways, open spaces, building locations, and parking area across adjoining properties to create a successful and integrated mixed-use neighborhood.

Policy OSUF 1.3: Prioritize pedestrian- and bicycle-oriented site and building features adjacent to open spaces, through parking areas and along major internal connections and enhanced public streets.

Policy OSUF 1.4: Locate buildings to face new and improved streets and connections, and design them to improve the experience of and encourage the use of non-vehicular transportation.

Policy OSUF 1.5: Include substantial and sustainable landscape and site design improvements during major remodeling and tenant improvement projects to realize the Plan

Area's vision for a mixed-use, walkable place with attractive landscaping, stormwater treatment, abundant tree canopy and an overall high-quality built environment.

Policy OSUF-1.7: Increase tree canopy and provide varying and visually engaging facades in new development.

Policy OSUF-1.8: Design new development to limit visual and noise impacts on open space and residential areas.

Policy OSUF-1.9: Provide a variety of public and private open space areas that are attractive, pedestrian-oriented streetscapes and gathering spaces to meet the needs of new and existing residents, visitors, workers and businesses.

Policy OSUF-2.1: Design and program open space areas to respond to the anticipated mixed-use environment and the needs of a variety of future users for both passive and active gathering spaces.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

For the purposes of this Draft Environmental Impact Report (EIR) and based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, implementation of the proposed project would have a significant effect on visual resources if it would:

a) Have a substantial adverse effect on a scenic vista;

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views[1] of the site and its surroundings or, if the project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality; or

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The following significance criteria would not apply to the proposed project and are therefore excluded from further discussion in this impact analysis:

- *Have a substantial adverse effect on a scenic vista.* The project would not affect a scenic vista, as the site is located within an urbanized portion of the City of Mountain View and views are restricted to the immediate environs.
- *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.* No designated state scenic highway is located within this portion of the City of Mountain View. In addition, no historic resources, trees, or rock outcroppings are located at the project site.
- *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings, or, if the project is in an urbanized area, conflict with*

[1] Public views are those that are experienced from publicly accessible vantage points.

*applicable zoning and other regulations governing scenic quality.* The project site is located within an urbanized area of the City of Mountain View, and therefore the portion of this criterion dealing with public views does not apply. The project would not conflict with applicable zoning or other regulations governing scenic quality. The project's consistency with applicable zoning is also addressed in *Section 4.10, Land Use*, of this EIR.

## Less-than-Significant Impacts

The project would not have any less-than-significant aesthetics impacts.

## Potentially Significant Impacts

**Impact AESTHETICS-1: The project could result in additional light and glare for nearby residential development due to lighting of the sports field at the west edge of the site. (PS)**

An analysis of the project's lighting impacts was completed by the firm of Pearce Renewables (formerly Natron Resources) and is provided in **Appendix C** of the EIR. The following is a summary of the analysis conclusions.

*General Discussion/Outdoor Sports Lighting*

The potential environmental impacts of outdoor sports lighting are generally evaluated as a combination of "light trespass" and "discomfort glare." Light trespass is defined as light spilling onto adjacent properties, differing from intended purpose and becoming a visual annoyance. Glare is defined as the visual discomfort experienced by an observer but can also be the contrast brightness of the light source.

Visual characteristics of outdoor sports lighting that may additionally be considered as being objectionable to some include sports light poles that either individually or cumulatively block a major view corridor. At the project site, however, the poles included in the project would not have a significant visual impact as there would not be a significant number of poles nor would a major view corridor be blocked.

*Sports Lighting Design Criteria*

The design of the proposed sports lighting system should provide light levels in accordance with recommendations of the Illuminating Engineering Society of North America (IESNA) (IESNA, 2022). Using the IESNA criteria, it is recommended that average illuminance in footcandles (fc)[2] be the following: baseball/softball field, 30 fc; soccer field, 30 fc; and practice field, 20 fc.

*Regulatory Environment*

The City of Mountain View has no standards or criteria by which to evaluate potential visual characteristics of outdoor sports lighting. This is typical of all jurisdictions nationwide currently, as there is no legal or uniformly accepted definition of light trespass. Commonly, the term is employed in reference to unwanted light at the property line disturbing the tranquility of an adjacent property owner.

[2] Footcandles measure the amount of visible light falling on a surface.

For example, San Diego County has an ordinance (Ordinance No.5933, November 19, 1980) dealing with light trespass. This ordinance was not intended to set limits on public sports lighting facilities. The ordinance places a limit of 0.02 fc—equivalent to “bright moonlight”—on the horizontal and vertical planes at points 5 feet inside the property line. The illumination the moon could technically provide is about 0.03 fc (exactly full moon, directly overhead), but what most people would consider to be "full" probably averages half that at most, around 0.015 fc. The San Diego County limit therefore restricts artificial light levels to the same intensity produced in the environment naturally.

Another reference is the City of Walnut Creek, which has a standard that sets a maximum limit of 1.0 fc for trespass light at the property line. This value is consistent with another source for environmental lighting, namely street lighting. Illumination of residential streets varies widely but can be found from less than 0.01 fc to greater than 1.0 fc as measured on pavement.

The California legislature has been working on outdoor lighting issues, including “dark sky” issues, and does consider such in part of the 2022 Energy Efficiency Building Standards, and the California Green Building Standards Code (CALGreen), but those standards do not include issues of light trespass from sports lighting, which is listed as an exempt category.

From recent experience it has been found that a 1.0-fc limit is too high to properly address the spill light impact in residential neighborhoods; that is, it would produce lighting impacts that would disturb the tranquility of adjacent property owners.

The potential for light trespass can be analyzed by computing lighting intensity (illuminance) on horizontal and vertical planes at various locations of concern and comparing the result to the ambient conditions. For the project site, due to its suburban character, the natural ambient nighttime conditions are like those of bright moonlight.

The most feasible maximum value of trespass light to achieve minimal neighborhood impact would be equal to or less than 0.2 fc, making the resulting illumination similar to that which would be created by residential streetlights.

*Criteria for Trespass Light and Glare*

For trespass/spill light mitigation, the maximum horizontal and vertical illumination at the property line of homes should not exceed 1.0 fc.[3] While this value is relatively low, the more important consideration for the impact on the neighborhood is the glare produced by the field lights. Glare represents the brightness of the observed light sources. Glare impact is measured in candelas (cd), which are a measure of the intensity of a light source in a particular direction and represent the brightness an observer would see facing the brightest light source from any direction.

For glare, the maximum value measured at 6 feet above ground, at the property line, in the viewed direction of the sports field, should not exceed 9,000 to 10,000 candelas (cd). There are no recognized standards for glare values; data are available pertaining to the discomfort level experienced by the observer. The value of 9,000 to 10,000 cd is a value known by professional

[3] 1.0 fc is the maximum set by certain California counties and 0.2 fc is the recommended limit set by the experience of the consultant evaluating lighting for this EIR. For this Draft EIR, the 1.0 fc criterion is used.

lighting experience to cause little to no discomfort to the observer and would result in very minimal impacts of spill light into homes or outdoor areas.

*Proposed Lighting Plan for Football Field, Baseball Field, and Small Practice Field*

Major considerations in the design of sport field lighting systems include illumination levels, pole heights, and position; light output of lamps; optical control of fixtures and glare shielding; ball check lighting (up light); and proximity to surrounding land uses and residential neighborhoods.

The area to the north of the project's proposed sports field would be a future City park, and beyond the park site are two-story residences on level ground, 360 feet from the proposed soccer field outer line. The west side of the proposed sport field consists of a multi-story parking lot building adjacent to a six-story hotel, around 80 feet from the field outline. This represents an area of spill light or glare concern. The area to the south side of the proposed sport field, across a public road approximately 120 feet from the outer line of the proposed baseball field, contains a fitness center and does not represent an area of spill light or glare concern. The area to the east side of the proposed sports field would be the play area of the proposed new school and does not represent an area of spill light or glare concern.

*Preliminary Site Plan*

As illustrated in the Electrical Site Plan (see **Appendix C**), the computer-predicted results for the lighting of the proposed soccer field, baseball/softball field, and practice field are indicated in Musco Sports Lighting's Illumination Summary (see **Appendix C**). Musco Sports Lighting uses light-emitting diode (LED) fixtures with a high degree of optical control that can produce the required mitigation of spill light toward directions of the outfield light fixtures.

The proposed sports light fixtures use 1,400-watt and 12,000-watt LED lamps and have aluminum housings with glare control. These fixtures have unique optical systems allowing precise beam control, to the point where it is a cost-effective option for recreational facilities.

The poles in the recommended plan would be 70 feet high. The selection of pole height was based on the need to provide adequate illumination at an economical cost, and to satisfactorily mitigate spill light toward residential properties adjacent to the fields. The configuration of the poles and light fixture clusters is illustrated in the Musco Sports Lighting product brochure attached as **Appendix C**.

The installation of the sport fields lights would produce spill light and glare to the west side of the fields. Mitigation measures would therefore be necessary to limit maximum spill light (measured in vertical and horizontal fcs) to be equal to or less than 1.0 fc at property lines. Such computer-predicted results can be field verified with a standard handheld illumination meter.

> <u>*Mitigation Measure AESTHETICS-1*</u>*: The following measures shall be implemented to minimize light and glare for nearby residences:*
>
> a) *All outdoor lighting shall be shielded and directed downward to minimize both sky-light and spill light, in accordance with California Code of Regulations (CCR) Title 24 outdoor lighting requirements. Lighting shall be controlled by photocontrols or time switches.*

*b) Using the Illuminating Engineering Society of North America (IESNA) criteria, it is recommended that average illuminance in footcandles (fc) be the following: baseball/softball field, 30 fc; soccer field, 30 fc; and practice field, 20 fc.*

*c) Glare shall be limited to a maximum of 9,000 to 10,000 candelas (cd), at 6 feet elevation, at the property line. Field testing using a meter for measurement of glare is not generally practical due to the unavailability of trained technicians and instruments.*

*d) To ensure that the maximum trespass/spill light on residences at the identified locations remains at or below 1.0 fc, field testing shall take place for the actual performance of the system prior to site occupancy.*

*e) Any need to re-aim and/or adjust the luminaires during the initial nighttime testing of the field lights shall be assessed and completed prior to site occupancy. This would ensure that no excessive trespass/spill light remains uncorrected.*

*f) The proposed field lights shall be provided with programmable controls to turn OFF the lights at a pre-set time recommended by the City of Mountain View and agreed upon by the Los Altos School District (LASD). Manual controls shall only be provided for testing the lights.*

*g) Additional control features that can be considered are dimming controls that would allow operation of the field illumination to be reduced for practice play when there are no spectators present, as well as for after-game clean-up work. These features have the benefit of allowing some degree of illumination after the prescribed time for when lights must be turned off immediately after a game.*

*The combination of the above mitigation measures would reduce this potential impact to less than significant. (LTS)*

### Cumulative Impacts

No significant cumulative aesthetic impacts would result from the project.

As shown in Table 6-1 in *Chapter 6*, *Other CEQA Considerations*, of this EIR, the pending or permitted projects in the site vicinity would include residential and hotel uses, mixed-use developments with residential and office/retail uses, commercial buildings, and the future City park. The future City park has not been designed but it is assumed that no major nighttime lighting would occur as this park would be for daytime use. With implementation of the recommended aesthetic mitigation measures for the project, as related to reduction of potential light and glare, the project would not contribute to cumulative aesthetic impacts. Some increased lighting would occur at night with the windows of higher buildings visible from nearby residential areas, but this cumulative impact would not be considered significant given the existing general lighting of this portion of the city. No additional mitigation measures would be necessary.

## REFERENCES

California Department of Transportation, 2023. Website: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways; accessed April 4.

City of Mountain View, 2012. Mountain View 2030 General Plan (last amended April 13, 2021).

City of Mountain View, 2014. San Antonio Precise Plan, adopted December 2.

Illuminating Engineering Society of North America (IESNA), 2022. RP-6-22 Current Recommended Practice for Sports Lighting, November.

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# 4.2 AIR QUALITY

## INTRODUCTION

This section of the Draft Environmental Impact Report (EIR) describes the current air quality conditions in Mountain View and its vicinity, discusses the regulations and policies pertinent to air quality, and assesses the potentially significant air quality impacts that could result from implementation of the project. The analysis in this section was prepared in accordance with the Bay Area Air Quality Management District (BAAQMD) California Environmental Quality Act (CEQA) Air Quality Guidelines (the BAAQMD's CEQA Guidelines).

## ENVIRONMENTAL SETTING

### Regional Climate, Meteorology, and Topography

Mountain View is located in the southeastern part of the San Francisco Peninsula, within the San Francisco Bay Area Air Basin (SFBAAB). Some air basins have natural characteristics that limit the ability of natural processes to either dilute or transport air pollutants. The major determinants of air pollution transport and dilution are climatic and topographic factors such as wind, atmospheric stability, terrain that influences air movement, and sunshine. Wind and terrain can combine to transport pollutants away from upwind areas, while solar energy can chemically transform pollutants in the air to create secondary photochemical pollutants such as ozone. The following discussion provides an overview of the environmental setting with regard to air quality in the SFBAAB.

The San Francisco Bay Area (Bay Area) has a Mediterranean climate characterized by wet winters and dry summers. During the summer, a high-pressure cell centered over the northeastern Pacific Ocean results in stable meteorological conditions and a steady northwesterly wind flow that generally keeps storms from affecting the California coast. During the winter, the Pacific high-pressure cell weakens, resulting in increased precipitation and the occurrence of storms. The highest air pollutant concentrations in the Bay Area generally occur during inversions, when a surface layer of cooler air becomes trapped beneath a layer of warmer air. An inversion reduces the amount of vertical mixing and dilution of air pollutants in the cooler air near the surface.

The San Francisco Peninsula region extends from northwest of San Jose to the Golden Gate. Cities in the southeastern peninsula, such as Mountain View, experience warmer temperatures and fewer foggy days because the marine layer is blocked by the ridgeline to the west. Mountain View experiences average maximum summer temperatures in the high 70 degrees Fahrenheit and average minimum winter temperatures in the low 40 degrees Fahrenheit. The prevailing winds in Mountain View are generally from the west.

Air pollution potential is highest along the southeastern portion of the San Francisco Peninsula, where Mountain View is located, as this area is most protected from the high winds and fog of the marine layer. Pollutant transport from upwind sites is common. In this area, air pollutant emissions are relatively high due to motor vehicle traffic as well as stationary sources (BAAQMD, 2017a).

## Air Pollutants of Concern

The California Air Resources Board (CARB) and United States Environmental Protection Agency (EPA) focus on the following air pollutants as regional indicators of ambient air quality:

- Ozone
- Coarse particulate matter (PM10)
- Fine particulate matter (PM2.5)
- Nitrogen dioxide
- Carbon monoxide
- Sulfur dioxide
- Lead

Because these are the most prevalent air pollutants known to be harmful to human health based on extensive criteria documents, they are referred to as “criteria air pollutants.” In the SFBAAB, the primary criteria air pollutants of concern are ground-level ozone formed through reactions of oxides of nitrogen (NOx) and reactive organic gases (ROG), PM10, and PM2.5. Regional air pollutants, such as ozone, PM10, and PM2.5, can be formed and/or transported over long distances and affect ambient air quality far from the emissions source. The magnitude and location of specific health effects from exposure to increased ozone, PM10, and PM2.5 concentrations are the result of emissions generated by numerous sources throughout the SFBAAB, as opposed to a single project.

The BAAQMD and other air districts use regional air dispersion models to correlate the cumulative emissions of regional pollutants to potential community health effects. However, these dispersion models have limited sensitivity to the relatively small (or negligible) changes in criteria air pollutant concentrations associated with an individual project. Therefore, it is not feasible to provide reliable estimates of specific health risks associated with regional air pollutant emissions from an individual project.

The BAAQMD operates a network of air monitoring stations throughout the SFBAAB to monitor air pollutants such as ozone, PM10, and PM2.5. **Table 4.2-1** presents a five-year (2017–2021) summary of the highest annual concentrations of ozone, PM2.5, and PM10 measured at the nearest monitoring station, located at 158B Jackson Street in San Jose approximately 12.3 miles southeast of Mountain View. Table 4.2-1 also compares measured pollutant concentrations with applicable state and federal ambient air quality standards, which are discussed further under *Regulatory Framework*, below.

Localized air pollutants generally dissipate with distance from the emission source and can pose a health risk to nearby populations. Toxic air contaminants (TACs), such as diesel particulate matter (DPM), are considered localized pollutants. PM2.5 is also considered a localized air pollutant, in addition to being considered a regional air pollutant. Air dispersion models can be used to reliably quantify the health risks to nearby receptors associated with emissions of localized air pollutants from an individual project.

**TABLE 4.2-1 AIR QUALITY TRENDS IN MOUNTAIN VIEW VICINITY**

| Pollutant | Standard | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|
| Ozone ($O_3$) | Maximum 1-Hour Concentration (ppm) | 0.121 | 0.078 | 0.095 | 0.106 | 0.098 |
| | Days > CAAQS (0.09 ppm) | 3 | 0 | 1 | 1 | 3 |
| | Maximum 8-Hour Concentration (ppm) | 0.099 | 0.061 | 0.082 | 0.086 | 0.085 |
| | Days > CAAQS (0.070 ppm) | 4 | 0 | 2 | 2 | 4 |
| | Days > NAAQS (0.070 ppm) | 4 | 0 | 2 | 2 | 4 |
| Coarse Particulate Matter (PM10) | Maximum 24-Hour Concentration (µg/m$^3$) | 69.8 | 121.8 | 77.1 | 137.1 | 45.1 |
| | Days > CAAQS (50 µg/m$^3$) | 19.2 | 12.2 | 11.8 | NV | 0.0 |
| | Days > NAAQS (150 µg/m$^3$) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | Annual Arithmetic Mean (µg/m$^3$) | 21.3 | 23.1 | 19.1 | 24.6 | 20.1 |
| Fine Particulate Matter (PM2.5) | Maximum 24-Hour Concentration (µg/m$^3$) | 49.7 | 133.9 | 34.4 | 120.5 | 38.1 |
| | Days > NAAQS (35 µg/m$^3$) | 6.0 | 15.5 | 0.0 | 12.0 | 1.0 |
| | Annual Arithmetic Mean (µg/m$^3$) | 9.5 | 12.9 | 9.1 | 12.0 | 8.9 |

Notes: CAAQS = California Ambient Air Quality Standards; µg/m$^3$ = micrograms per cubic meter; NAAQS National Ambient Air Quality Standards; ppm = parts per million; NV = no value due to insufficient data.
State statistics are based on California-approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods. State and national statistics may therefore be based on different samplers. When the measured state and national concentrations varied due to different sample methods, the highest concentration was reported in the summary table.
Source: California Air Resources Board (CARB), 2023.

The primary air pollutants of concern in the SFBAAB and their associated health risks are discussed below.

*Ozone*

While ozone serves a beneficial purpose in the upper atmosphere (stratosphere) by reducing ultraviolet radiation, it can be harmful to the human respiratory system and to sensitive species of plants when it reaches elevated concentrations in the lower atmosphere. Ozone is not emitted directly into the environment but is formed in the atmosphere by chemical reactions between ROG and NOx in the presence of sunlight. Ozone formation is greatest during periods of little or no wind, bright sunshine, and high temperatures. As a result, levels of ozone usually build up during the day and peak in the afternoon.

Sources of ROG and NOx are vehicle tailpipe emissions; evaporation of solvents, paints, and fuels; and biogenic emissions.[1] Automobiles are the single largest source of ozone precursors in the SFBAAB. Short-term ozone exposure can reduce lung function in children, facilitate respiratory infections, and produce symptoms of respiratory distress. Long-term exposure can impair lung

[1] Biogenic sources include volatile organic compounds, which include ROG, from the decomposition of vegetative matter and certain plants, such as oak and pine trees.

defense mechanisms and lead to emphysema and chronic bronchitis. Ozone can also damage plants and trees and materials such as rubber and fabrics.

*Particulate Matter*

PM10 and PM2.5 consist of extremely small, suspended particles or droplets that are 10 microns and 2.5 microns or smaller in diameter, respectively. Some sources of particulate, such as pollen, forest fires, and windblown dust matter, are naturally occurring. In populated areas, however, most particulate matter is caused by road dust, combustion by-products, abrasion of tires and brakes, and construction activities. Particulate matter can also be formed in the atmosphere by condensation of sulfur dioxide and ROG.

Exposure to particulate matter can affect breathing, aggravate existing respiratory and cardiovascular disease, alter the body's defense systems against foreign materials, and damage lung tissue, contributing to cancer and premature death. Individuals with chronic obstructive pulmonary or cardiovascular disease, asthmatics, the elderly, and children are most sensitive to the effects of particulate matter.

*Toxic Air Contaminants*

TACs include a diverse group of air pollutants that can adversely affect human health. Unlike criteria air pollutants, which generally affect regional air quality, TAC emissions are evaluated based on estimations of localized concentrations and risk assessments. The adverse health effects a person may experience following exposure to any chemical depend on several factors, including the amount (dose), duration, chemical form, and any simultaneous exposure to other chemicals.

For risk assessment purposes, TACs are separated into carcinogens and non-carcinogens. Carcinogens are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per 1 million exposed individuals over a lifetime of exposure. Non-carcinogenic substances are generally assumed to have a safe threshold below which health impacts would not occur. Acute and chronic exposure to non-carcinogens is expressed as a hazard index, which is the sum of expected exposure levels divided by the corresponding acceptable exposure levels.

In the SFBAAB, adverse air quality impacts on public health from TACs are predominantly from DPM. Emissions of DPM and PM2.5 generated from the exhaust of diesel-powered engines are a complex mixture of soot, ash particulates, metallic abrasion particles, volatile organic compounds, and other components that can penetrate deeply into the lungs and contribute to a range of health problems. In 1998, CARB identified DPM from diesel-powered engines as a TAC based on its potential to cause cancer and other adverse health effects (CARB, 1998). While diesel exhaust is a complex mixture that includes hundreds of individual constituents, DPM is used as a surrogate measure of exposure, under California regulatory guidelines, for the mixture of chemicals that make up diesel exhaust as a whole. More than 90 percent of DPM is less than 1 micron in diameter and is thus a subset of PM10 and PM2.5 (CARB, 2016). The estimated cancer risk from exposure to diesel exhaust is much higher than the risk associated with any other TACs routinely measured in the region.

### Existing Sources and Levels of Local Air Pollution

In the Bay Area, stationary and mobile sources are the primary contributors of TACs and PM2.5 emissions to local air pollution. In an effort to promote healthy infill development from an air quality perspective, the BAAQMD has prepared guidance entitled Planning Healthy Places (BAAQMD, 2016). The purpose of this guidance document is to encourage local governments to address and minimize potential local air pollution issues early in the land-use planning process, and to provide technical tools to assist them in doing so. Based on a screening-level cumulative analysis of mobile and stationary sources in the Bay Area, the BAAQMD mapped localized areas of elevated air pollution that (1) exceed an excess cancer risk of 100 in a million; (2) exceed PM2.5 concentrations of 0.8 micrograms per cubic meter; or (3) are located within 500 feet of a freeway, 175 feet of a major roadway (with more than 30,000 annual average daily vehicle trips), or 500 feet of a ferry terminal. Within these localized areas of elevated air pollution, the BAAQMD encourages local governments to implement best practices to reduce exposure to and emissions from local sources of air pollutants. According to the BAAQMD, elevated levels of PM2.5 and/or TAC pollution do not currently extend across the project site (BAAQMD, 2023a).

### Existing Sensitive Receptors

Sensitive receptors are areas where individuals are more susceptible to the adverse effects of poor air quality. Sensitive receptors include, but are not limited to, hospitals, schools, daycare facilities, elderly housing, and convalescent facilities. Residential areas are also considered sensitive receptors because people are often at home for extended periods, thereby increasing the duration of exposure to potential air contaminants. Existing sensitive land uses near the project site include residences approximately 100 feet northeast of the project site boundary and residences located approximately 120 feet east of the project site boundary.

## REGULATORY FRAMEWORK

This section describes existing federal, state, regional, and local regulations related to air quality.

### Federal and State Regulations

The federal EPA is responsible for implementing the programs established under the Federal Clean Air Act, such as establishing and reviewing the National Ambient Air Quality Standards (NAAQS) and judging the adequacy of State Implementation Plans to attain the NAAQS. A State Implementation Plan must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. If a state fails to enforce its implementation of approved regulations, or if the EPA determines that a State Implementation Plan is inadequate, the EPA is required to prepare and enforce a Federal Implementation Plan to promulgate comprehensive control measures for a given State Implementation Plan.

CARB is responsible for establishing and reviewing the California Ambient Air Quality Standards (CAAQS), developing and managing the California State Implementation Plans, identifying TACs, and overseeing the activities of regional air quality management districts. In California, mobile emissions sources (e.g., construction equipment, trucks, and automobiles) are regulated by CARB and stationary emissions sources (e.g., industrial facilities) are regulated by the regional air quality management districts.

The CAAQS and NAAQS, which were developed for criteria air pollutants, are intended to incorporate an adequate margin of safety to protect the public health and welfare. California also has ambient air quality standards for sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride. To achieve CAAQS, criteria air pollutant emissions are managed through control measures described in regional air quality plans as well as emission limitations placed on permitted stationary sources.

In accordance with the Federal Clean Air Act and California Clean Air Act, areas in California are classified as either in attainment, maintenance (i.e., former nonattainment), or nonattainment of the NAAQS and CAAQS for each criteria air pollutant. To assess the regional attainment status, the BAAQMD collects ambient air quality data from over 30 monitoring sites within the SFBAAB. Based on current monitoring data, the SFBAAB is designated as a nonattainment area for ozone, PM10, and PM2.5, and is designated an attainment or unclassified area for all other pollutants (see **Table 4.2-2).**

Regulation of TACs, referred to as hazardous air pollutants (HAPs) under federal regulations, is achieved through federal, state, and local controls on individual sources. The air toxics provisions of the federal Clean Air Act require the EPA to identify HAPs that are known or suspected to cause cancer or other serious health effects to protect public health and welfare, and to establish National Emission Standards for Hazardous Air Pollutants. California regulates TACs primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act created California's program to identify and reduce exposure to TACs. To date, CARB has identified over 21 TACs and adopted the EPA's list of 188 HAPs as TACs. The Hot Spots Act supplements the Tanner Act by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks.

## Regional and Local Regulations

*Bay Area Air Quality Management District Responsibilities*

The BAAQMD is primarily responsible for ensuring that the NAAQS and CAAQS are attained and maintained in the SFBAAB. The BAAQMD fulfills this responsibility by adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits, inspecting stationary sources of air pollutants, responding to citizen complaints, and monitoring ambient air quality and meteorological conditions. The BAAQMD also awards grants to reduce motor vehicle emissions and conducts public education campaigns and other activities associated with improving air quality within the SFBAAB.

Demolition of existing buildings and structures is subject to BAAQMD Regulation 11, Rule 2 (Asbestos Demolition, Renovation, and Manufacturing), which limits asbestos emissions from demolition or renovation of structures and the associated disturbance of asbestos-containing waste material generated or handled during these activities. The rule addresses the national emissions standards for asbestos and contains additional requirements. The rule requires the Lead Agency

**TABLE 4.2-2 AIR QUALITY STANDARDS AND BAY AREA ATTAINMENT STATUS**

| | | CAAQS | | NAAQS | |
|---|---|---|---|---|---|
| Pollutant | Averaging Time | Concentration | Attainment Status | Concentration | Attainment Status |
| Ozone | 8 Hours | 0.070 ppm | N | 0.070 ppm | N |
| | 1-Hour | 0.09 ppm | N | Revoked in 2005 | --- |
| Carbon Monoxide | 8 Hours | 9.0 ppm | A | 9 ppm | A |
| | 1-Hour | 20 ppm | A | 35 ppm | A |
| Nitrogen Dioxide | 1-Hour | 0.18 ppm | A | 0.100 ppm | U |
| | Annual | 0.030 ppm | --- | 0.053 ppm | A |
| Sulfur Dioxide | 24 Hours | 0.04 ppm | A | 0.14 ppm | A |
| | 1-Hour | 0.25 ppm | A | 0.075 ppm | A |
| | Annual | --- | --- | 0.030 ppm | A |
| Coarse Particulate Matter (PM10) | Annual | 20 µg/m³ | N | --- | --- |
| | 24 Hours | 50 µg/m³ | N | 150 µg/m³ | U |
| Fine Particulate Matter (PM2.5) | Annual | 12 µg/m³ | N | 12 µg/m³ | U/A |
| | 24 Hours | --- | --- | 35 µg/m³ | N |
| Sulfates | 24 Hours | 25 µg/m³ | A | --- | --- |
| Lead | 30 Days | 1.5 µg/m³ | A | --- | --- |
| | Calendar Quarter | --- | --- | 1.5 µg/m³ | A |
| | Rolling 3 Months | --- | --- | 0.15 µg/m³ | A |
| Hydrogen Sulfide | 1-Hour | 0.03 ppm | U | --- | --- |
| Vinyl Chloride | 24 Hours | 0.010 ppm | U | --- | --- |
| Visibility Reducing Particles | 8 Hours (10:00 to 18:00 PST) | --- | U | --- | --- |

Notes: CAAQS = California Ambient Air Quality Standards; NAAQS National Ambient Air Quality Standards; A = Attainment; N = Nonattainment; U = Unclassified; "---" = not applicable; ppm = parts per million; µg/m³ = micrograms per cubic meter; PST = Pacific Standard Time.
Source: Bay Area Air Quality Management District (BAAQMD), 2017b.

and its contractors to notify the BAAQMD of any regulated renovation or demolition activity. The notification must include a description of the affected structures and the methods used to determine the presence of asbestos-containing materials. All asbestos-containing material found on site must be removed prior to demolition or renovation activity in accordance with BAAQMD Regulation 11, Rule 2, which includes specific requirements for surveying, notification, removal, and disposal of materials that contain asbestos. Implementation of Regulation 11, Rule 2 ensures that asbestos-containing materials are disposed of appropriately and safely.

The BAAQMD's CEQA Guidelines include thresholds of significance to assist lead agencies in evaluating and mitigating air quality impacts under CEQA (BAAQMD, 2023b). The BAAQMD's thresholds establish levels at which emissions of ozone precursors (ROG and NOx), PM10, PM2.5, TACs, and odors could cause significant air quality impacts. The scientific soundness of the thresholds is supported by substantial evidence presented in Appendix A: Thresholds of Significance Justification of the BAAQMD's CEQA Guidelines.

*Bay Area Clean Air Plan*

In accordance with the California Clean Air Act, the BAAQMD is required to prepare and update an air quality plan that outlines measures by which both stationary and mobile sources of pollutants can be controlled to achieve the NAAQS and CAAQS in areas designated as nonattainment. In April 2017, the BAAQMD adopted the 2017 Clean Air Plan: Spare the Air, Cool the Climate (2017 CAP). The 2017 CAP includes 85 control measures to reduce ozone precursors, particulate matter, TACs, and greenhouse gases (GHGs). The 2017 CAP was developed based on a multi-pollutant evaluation method that incorporates well-established studies and methods of quantifying health benefits; air quality regulations; computer modeling and analysis of existing air quality monitoring data and emissions inventories; and traffic and population growth projections prepared by the Metropolitan Transportation Commission and the Association of Bay Area Governments, respectively.

*City of Mountain View 2030 General Plan*

The City of Mountain View 2030 General Plan (City of Mountain View, 2012) includes the following policies related to air quality:

Policy INC 20.1: *Pollution prevention.* Discourage mobile and stationary sources of air pollution.

Policy INC 20.2: *Collaboration.* Participate in state and regional planning efforts to improve air quality.

Policy INC 20.3: *Pollution-reduction technologies.* Encourage the use of non-fossil fuels and other pollution-reduction technologies in transportation, machinery and industrial processes.

Policy INC 20.4: *Freight routes.* Identify and maintain primary freight routes that provide direct access to industrial and commercial areas.

Policy INC 20.5: *Truck access.* Plan industrial and commercial development to avoid truck access through residential areas and minimize truck travel on streets designated primarily for residential access by the General Plan.

Policy INC 20.6: *Air quality standards.* Protect the public and construction workers from construction exhaust and particulate emissions.

Policy INC 20.7: *Protect sensitive receptors.* Protect the public from substantial pollutant concentrations.

Policy INC 20.8: *Offensive odors.* Protect residents from offensive odors.

*LASD Policies and Regulations*

Los Altos School District (LASD) policies and regulations that would apply to the project and were adopted for the purpose of avoiding or mitigating impacts related to air quality are as follows (LASD, 2023):

Policy 3514: *Environmental Safety.* This policy aims to provide a safe and healthy environment at school facilities for students, staff, and community members. The Superintendent must regularly assess school facilities to identify environmental health risks and establish a comprehensive plan to prevent and/or mitigate environmental hazards based on a consideration of the proven effectiveness of various options, anticipated short-term and long-term costs and/or savings to the district, and the potential impact on staff attendance, student attendance, and student achievement. Strategies addressed in the district's plan must include, but not necessarily be limited to, the following:

1. Ensuring good indoor air quality by maintaining adequate ventilation; using effective maintenance operations to reduce dust, mold, mildew, and other indoor air contaminants; and considering air quality in the site selection, design, and furnishing of new or remodeled facilities.
2. Limiting outdoor activities when necessary due to poor outdoor air quality, including excessive smog, smoke, or ozone, or when ultraviolet radiation levels indicate a high risk of harm.
3. Reducing exposure to diesel exhaust and other air contaminants by limiting unnecessary idling of school buses and other commercial motor vehicles.
4. Minimizing exposure to lead in paint, soil, and drinking water.
5. Inspecting facilities for naturally occurring asbestos and asbestos-containing building materials that pose a health hazard due to damage or deterioration and safely removing, encapsulating, enclosing, or repairing such materials.
6. Ensuring the proper storage, use, and disposal of potentially hazardous substances.
7. Ensuring the use of effective least toxic pest management practices.

Regulation 3514: *Environmental Safety.* This regulation includes requirements related to providing proper ventilation to reduce indoor air contaminants; regularly inspecting for water damage, spills, leaks in plumbing and roofs, poor drainage, and improper ventilation so as to preclude the buildup of mold and mildew; sealing exterior wall and foundation cracks to minimize seepage of radon into buildings; using the least toxic pest management practices; limiting the painting of school facilities and maintenance or repair duties that require the use of potentially harmful substances to those times when school is not in session; storing paints, adhesives, and solvents in small quantities and in well-ventilated areas; placing printing and duplicating equipment that may generate indoor air pollutants, such as methyl alcohol or ammonia, in locations that are well ventilated and not frequented by students and staff; and not allowing the use of lead-based paint, lead plumbing and solders, or other potential sources of lead contamination in the construction of any new school facility.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Significance Criteria

Implementation of the proposed project would result in a significant air quality impact if it would:

a) Conflict with or obstruct implementation of the applicable air quality plan;

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard;

c) Expose sensitive receptors to substantial pollutant concentrations; or

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The BAAQMD's thresholds of significance have established levels at which emissions of air pollutants of concern (ROG, NOx, PM10, PM2.5, and TACs) and odors could cause significant air quality impacts (BAAQMD, 2023b). The BAAQMD's thresholds of significance used in this CEQA analysis are summarized in **Table 4.2-3**, below.

### Less-than-Significant Impacts

*Conflict with Air Quality Plan*

*The project would not conflict with or obstruct implementation of the applicable air quality plan.*

The BAAQMD's 2017 CAP is the applicable air quality plan for projects located in the SFBAAB. Consistency may be determined by evaluating whether the project supports the primary goals of the 2017 CAP, including applicable control measures contained within the 2017 CAP, and would not conflict with or obstruct implementation of any 2017 CAP control measures.

The primary goals of the 2017 CAP are the attainment of ambient air quality standards and reduction of population exposure to air pollutants for the protection of public health in the Bay Area. Because the project would not result in any significant and unavoidable air quality impacts related to emissions, ambient concentrations, or public exposures (see discussions below), the project would support the primary goals of the 2017 CAP.

The control measures from the 2017 CAP, which aim to reduce air pollution and GHGs from stationary, area, and mobile sources, are organized into nine categories: stationary sources, transportation, buildings, energy, agriculture, natural and working lands, waste management, water, and super-GHG pollutants (e.g., methane, black carbon, and fluorinated gases). As described in **Table 4.2-4**, the project would be consistent with applicable control measures from the 2017 CAP. Therefore, the project would not conflict with or obstruct implementation of the applicable air quality plan, and the impact would be less than significant.

**TABLE 4.2-3 BAY AREA AIR QUALITY MANAGEMENT DISTRICT (BAAQMD) PROJECT-LEVEL THRESHOLDS OF SIGNIFICANCE FOR AIR QUALITY**

| Impact Analysis | Pollutant | Threshold |
|---|---|---|
| Regional Air Quality (Construction) | ROG | 54 pounds/day (average daily emission) |
| | NOx | 54 pounds/day (average daily emission) |
| | Exhaust PM10 | 82 pounds/day (average daily emission) |
| | Exhaust PM2.5 | 54 pounds/day (average daily emission) |
| | Fugitive dust (PM10 and PM2.5) | Best management practices |
| Regional Air Quality (Operation) | ROG | 54 pounds/day (average daily emission)<br>10 tons/year (maximum annual emission) |
| | NOx | 54 pounds/day (average daily emission)<br>10 tons/year (maximum annual emission) |
| | PM10 | 82 pounds/day (average daily emission)<br>15 tons/year (maximum annual emission) |
| | PM2.5 | 54 pounds/day (average daily emission)<br>10 tons/year (maximum annual emission) |
| Local Community Risks and Hazards (Construction and Operation) | Exhaust PM2.5 (project) | 0.3 μg/m$^3$ (annual average) |
| | TACs (project) | Cancer risk increase > 10.0 in one million<br>Chronic hazard index > 1.0 |
| | Exhaust PM2.5 (cumulative) | 0.8 μg/m$^3$ (annual average) |
| | TACs (cumulative) | Cancer risk > 100 in one million<br>Chronic hazard index > 10.0 |

Notes: ROG = reactive organic gases; NOx = oxides of nitrogen; PM10 = coarse particulate matter; PM2.5 = fine particulate matter; TACs = toxic air contaminants; μg/m$^3$ = micrograms per cubic meter
Source: Bay Area Air Quality Management District (BAAQMD), 2023b.

**TABLE 4.2-4 PROJECT CONSISTENCY WITH BAY AREA AIR QUALITY MANAGEMENT DISTRICT (BAAQMD) 2017 CLEAN AIR PLAN (CAP)**

| Control Measures | Proposed Project Consistency |
|---|---|
| Stationary Source | The stationary source measures, which are designed to reduce emissions from stationary sources, are incorporated into rules adopted by the BAAQMD and then enforced by the BAAQMD's Permit and Inspection programs. Since the project does not include any stationary sources such as diesel emergency generators or fire pumps, the stationary source control measures are **not applicable** to the project. |
| Transportation | The transportation control measures are designed to reduce vehicle trips, use, miles traveled, idling, or traffic congestion for the purpose of reducing vehicle emissions. According to *Section 4.14, Transportation*, of this EIR, the project would generate fewer daily trips than the existing commercial operations on the project site, resulting in a net reduction in daily vehicle trip generation and vehicle miles traveled. Therefore, the project would be **consistent** with the transportation control measures in the 2017 CAP. |

**TABLE 4.2-4 PROJECT CONSISTENCY WITH BAY AREA AIR QUALITY MANAGEMENT DISTRICT (BAAQMD) 2017 CLEAN AIR PLAN (CAP)**

| Control Measures | Proposed Project Consistency |
|---|---|
| Energy | The energy control measures are designed to reduce emissions of criteria air pollutants, TACs, and GHGs by decreasing the amount of electricity consumed in the Bay Area, as well as decreasing the carbon intensity of the electricity used by switching to less GHG-intensive fuel sources for electricity generation. Since these measures primarily apply to electrical utility providers, the energy control measures are **not applicable** to the project. However, as discussed in *Section 4.5, Energy*, of this EIR, LASD has adopted a 2030 Zero Net Energy (ZNE) goal (Gelfand, 2022), which would be achieved by applying measures such as installing solar panels, eliminating natural gas use, installing electric vehicle (EV) infrastructure, and purchasing green power. |
| Buildings | The BAAQMD has authority to regulate emissions from certain sources in buildings such as boilers and water heaters but has limited authority to regulate buildings themselves. Therefore, the building control measures focus on working with local governments that have authority over local building codes to facilitate adoption of best practices and policies to control GHG emissions. The project would comply with the current Title 24 Building Energy Efficiency Standards.. In addition, LASD has adopted a 2030 ZNE goal (Gelfand, 2022). Therefore, the proposed project would be **consistent** with the buildings control measures of the 2017 CAP. |
| Agriculture | The agriculture control measures are designed to primarily reduce emissions of methane. Since the project would not include any agricultural activities, the agriculture control measures of the 2017 CAP are **not applicable** to the project. |
| Natural and Working Lands | The control measures for the natural and working lands sector focus on increasing carbon sequestration on rangelands and wetlands, as well as encouraging local governments to adopt ordinances that promote urban-tree plantings. Since the project would not disturb any rangelands or wetlands, the natural and working lands control measures of the 2017 CAP are **not applicable** to the project. |
| Waste Management | The waste management measures focus on reducing or capturing methane emissions from landfills and composting facilities, diverting organic materials away from landfills, and increasing waste diversion rates through efforts to reduce, reuse, and recycle. The proposed project would comply with local requirements for waste management. Therefore, the project would be **consistent** with the waste management control measures of the 2017 CAP. |
| Water | The water control measures to reduce emissions from the water sector will reduce emissions of criteria pollutants, TACs, and GHGs by encouraging water conservation, limiting GHG emissions from publicly owned treatment works (POTWs), and promoting the use of biogas recovery systems. Since these measures apply to POTWs and local government agencies (and not individual projects), the water control measures of the 2017 CAP are **not applicable** to the project. |
| Super GHGs | The super-GHG control measures are designed to facilitate the adoption of best GHG control practices and policies through the BAAQMD and local government agencies. Since these measures do not apply to individual developments, the super-GHG control measures of the 2017 CAP are **not applicable** to the project. |

Source: Bay Area Air Quality Management District (BAAQMD), 2017c.

### *Increase in Criteria Air Pollutants*

*Except for fugitive dust during project construction (addressed in Impact AIR-1 below), the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.*

The BAAQMD recommends using the most current version of the California Emissions Estimator Model (CalEEMod Version 2022.1) to estimate construction and operational emissions of pollutants resulting from a proposed project. CalEEMod uses widely accepted models for emission estimates combined with appropriate default data for a variety of land-use projects that can be used if site-specific information is not available. The default data (e.g., type and power of construction equipment) are supported by substantial evidence provided by regulatory agencies and a combination of statewide and regional surveys of existing land uses. The primary input data used to estimate emissions associated with construction and operation of the proposed project are summarized in **Table 4.2-5**. A copy of the CalEEMod report for the proposed project, which summarizes the input parameters, assumptions, and findings, is included as **Appendix D**.

**TABLE 4.2-5 PROJECT LAND-USE INPUT PARAMETERS**

| Project Development | CalEEMod Land-Use Type | Unit | Amount |
|---|---|---|---|
| LASD 10th Campus (Kindergarten through K-8) | Elementary School | Square Feet | 89,570 (building area) |
| | | | 54,388 (landscape) |
| Active Playfields (Artificial Turf) | Golf Course | Acre | 3.17 |
| Active Playfields (Asphalt Play Surfaces) | Other Asphalt Surfaces | 1,000 Square Feet | 34.2 |
| Other Impervious Surfaces | Other Asphalt Surfaces | 1,000 Square Feet | 86.2 |
| Parking Lot | Parking Lot | Space | 51 |

Source: A copy of CalEEMod report is provided in **Appendix D**.

<u>Criteria Air Pollutants from Project Construction</u>

Project construction activities would generate criteria air pollutant emissions that could potentially affect regional air quality. During construction, the primary pollutant emissions of concern would be ROG, NOx, PM10, and PM2.5 from the exhaust of off-road construction equipment and on-road construction vehicles related to worker vehicles, vendor trucks, and haul trucks. In addition, fugitive dust emissions of PM10 and PM2.5 would be generated by soil disturbance and demolition activities, and fugitive ROG emissions would result from paving. Emissions of ROG, NOx, PM10, and PM2.5 during project construction were estimated using the CalEEMod input parameters summarized in Table 4.2-5 and additional assumptions summarized in **Table 4.2-6**.

To analyze daily emission rates, the total emissions estimated during construction were averaged over the total working days (351 days) and compared to the BAAQMD's thresholds of significance. As shown in **Table 4.2-7**, the project's estimated emissions for ROG, NOx, and exhaust PM10 and PM2.5 during construction were below the thresholds of significance and, therefore, would not result in a cumulatively considerable net increase in criteria air pollutants for which the region is in nonattainment. Therefore, this impact is less than significant. The impact of fugitive dust during construction is addressed in Impact AIR-1 below.

**TABLE 4.2-6 PROJECT CONSTRUCTION ASSUMPTIONS FOR CALIFORNIA EMISSIONS ESTIMATOR MODEL (CALEEMOD)**

| CalEEMod Input Category | Construction Assumptions and Changes to Default Data |
|---|---|
| Construction Phase | Project construction was assumed to begin in early 2025 and continue for 18 months through mid-2026. Based on the size of a project, CalEEMod applies default assumptions regarding equipment usage and construction phase lengths. These default assumptions are based on a statewide survey of construction projects. The duration for the demolition phase of the project was provided by LASD. CalEEMod default construction durations were used to estimate the emissions from other construction phases. |
| Construction Equipment | The on-site construction equipment list for demolition was modified according to site-specific construction information provided by LASD (**Appendix D**). CalEEMod default construction equipment lists were used for other construction phases. |
| Material Movement | It was assumed that 17,450 cubic yards of soil impacted by naturally occurring asbestos would be excavated, hauled off-site, and then replaced with 17,450 cubic yards of imported clean soil. For demolition, it was assumed that 21,350 tons of demolition debris would be hauled off-site. |
| Worker, Vendor, and Hauling Trips | Demolition-related vehicle trips, fleet mix, one-way travel distance, and trip activity were provided by LASD (**Appendix D**). CalEEMod default worker and vendor trips were used for other construction phases. |

Note: Default CalEEMod data used for all other parameters are not described.
Source: Construction information provided by the project proponent and a copy of CalEEMod report are provided in **Appendix D**.

**TABLE 4.2-7 ESTIMATED PROJECT CONSTRUCTION EMISSIONS (POUNDS PER DAY)**

| Emissions Scenario | ROG | NOx | Exhaust PM10 | Exhaust PM2.5 |
|---|---|---|---|---|
| Construction Emissions | 4.0 | 12.2 | 0.40 | 0.34 |
| BAAQMD Thresholds of Significance | 54 | 54 | 82 | 54 |
| **Threshold Exceedance?** | **No** | **No** | **No** | **No** |

Notes: BAAQMD = Bay Area Air Quality Management District; ROG = reactive organic gases; NOx = oxides of nitrogen; PM10 = coarse particulate matter; PM2.5 = fine particulate matter
Source: A copy of the California Emissions Estimator Model (CalEEMod) report is provided in **Appendix D**.

### Criteria Air Pollutants from Project Operation

Project operation would generate criteria air pollutant emissions that could potentially affect regional air quality. The primary pollutant emissions of concern during project operation would be ROG, NOx, PM10, and PM2.5 from mobile sources, energy use, and area sources (e.g., consumer products, architectural coatings, and landscape maintenance equipment). To evaluate the project's net increase in criteria air pollutant emissions relative to existing conditions, emissions from the existing commercial buildings on the project site were subtracted from the project's estimated emissions. Operational criteria air pollutant emissions from existing commercial buildings were estimated for 2022 using the CalEEMod input parameters summarized in **Table 4.2-8**.

**TABLE 4.2-8 EXISTING CONDITION LAND-USE INPUT PARAMETERS**

| Existing Land-Use | CalEEMod Land-Use Type | Unit | Amount |
|---|---|---|---|
| JoAnn Fabrics | Hardware/Paint Store | 1,000 Square Feet | 16.0 |
| 24-Hour Fitness | Health Club | 1,000 Square Feet | 44.0 |
| GameStop and T-Mobile | Electronic Superstore | 1,000 Square Feet | 3.0 |
| Restaurants | Fast Food Restaurant w/o Drive Thru | 1,000 Square Feet | 9.0 |
| Kohl's | Home Improvement Superstore | 1,000 Square Feet | 65.0 |

Source: A copy of CalEEMod report is provided in **Appendix D**.

Project emissions were estimated for 2026, which is the earliest expected year of operation. Since statewide vehicle emission standards are required to improve over time in accordance with the Pavley (Assembly Bill [AB] 1493) and Low-Emission Vehicle regulations (Title 13, California Code of Regulations [CCR], Section 1961.2), estimating emissions for the earliest year of operation provides the maximum expected annual emissions. Additional project-specific information used to calculate operation emissions in CalEEMod, including changes to default data, is summarized in **Table 4.2-9**.

**TABLE 4.2-9 PROJECT OPERATION ASSUMPTIONS FOR CALIFORNIA EMISSIONS ESTIMATOR MODEL (CALEEMOD)**

| CalEEMod Input Category | Construction Assumptions and Changes to Default Data |
|---|---|
| Vehicle Trips | Daily trip rates for the project were adjusted according to the daily trip generation of 1,002 trips reported in the project-specific transportation analysis (Parisi Transportation Consulting, 2023). It was assumed that the trips would occur on weekdays. |
| Control Measures (CalEEMod Measure E-16 Require Zero Net Energy Buildings) | The Los Altos School District (LASD) has adopted a 2030 Zero Net Energy (ZNE) goal. This CalEEMod control measure assumes that buildings would be all-electric and that either (1) electricity would be supplied by on-site renewables, or (2) utility electricity emissions would be offset by purchase of off-site renewable energy. |

Notes: Default CalEEMod data used for all other parameters are not described.
Source: A copy of CalEEMod report is provided in **Appendix D.**

The estimated operational maximum annual emissions and average daily emissions for the existing condition and the project are presented in **Table 4.2-10.** As shown in Table 4.2-10, operation of the project would result in a net increase in PM10 emissions that are below the BAAQMD threshold of significance and a net decrease in emissions of ROG, NOx, and PM2.5. Moreover, the estimated emissions for ROG, $NO_x$, PM10, and PM2.5 during operation of the project, without subtracting the existing emissions, are below the BAAQMD thresholds of significance. Therefore, the ROG, $NO_x$, PM10, and PM2.5 emissions from project operation would not result in a cumulatively considerable net increase in criteria air pollutants for which the region is in nonattainment, and the impact on regional air quality would be less than significant.

**TABLE 4.2-10 ESTIMATED OPERATION EMISSIONS (EXISTING CONDITION AND PROJECT)**

| | | Maximum Annual Emissions (Tons) | | | | Average Daily Emissions (Pounds) | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Emissions Scenario** | | **ROG** | **NOx** | **PM10** | **PM2.5** | **ROG** | **NOx** | **PM10** | **PM2.5** |
| Existing Condition | Mobile | 5.26 | 4.83 | 3.07 | 0.59 | 28.8 | 26.5 | 16.8 | 3.2 |
| | Area | 2.70 | 0.02 | <0.005 | <0.005 | 14.8 | 0.10 | 0.02 | 0.02 |
| | Energy | 0.06 | 1.03 | 0.08 | 0.08 | 0.31 | 5.63 | 0.43 | 0.43 |
| | **Total** | **8.0** | **5.9** | **3.15** | **0.67** | **43.9** | **32.2** | **17.3** | **3.7** |
| Project | Mobile | 0.40 | 0.34 | 0.32 | 0.06 | 2.18 | 1.88 | 1.75 | 0.33 |
| | Area | 0.47 | <0.005 | <0.005 | <0.005 | 2.58 | 0.02 | <0.005 | <0.005 |
| | Energy | 0.01 | 0.18 | 0.01 | 0.01 | 0.05 | 0.99 | 0.08 | 0.08 |
| | **Total** | **0.9** | **0.52** | **0.33** | **0.07** | **4.8** | **2.9** | **1.83** | **0.41** |
| Net Project | Mobile[a] | 0.40 | 0.34 | 0.32 | 0.06 | 2.18 | 1.88 | 1.75 | 0.33 |
| | Area[b] | -2.23 | -0.02 | <0.005 | <0.005 | -12.22 | -0.08 | -0.02 | -0.02 |
| | Energy | -0.05 | -0.85 | -0.07 | -0.07 | -0.26 | -4.64 | -0.35 | -0.35 |
| | **Total** | **-1.88** | **-0.53** | **0.25** | **-0.01** | **-10.30** | **-2.84** | **1.39** | **-0.04** |
| **BAAQMD Thresholds of Significance** | | 10 | 10 | 15 | 10 | 54 | 54 | 82 | 54 |
| **Threshold Exceedance?** | | **No** | **No** | **No** | **No** | **No** | **No** | **No** | **No** |

Notes: BAAQMD = Bay Area Air Quality Management District; ROG = reactive organic gases; NOx = oxides of nitrogen; PM10 = coarse particulate matter; PM2.5 = fine particulate matter

[a] It was conservatively assumed that the trips generated by existing commercial operations would not cease to occur after the existing buildings have been removed. This assumption was based on the expectation that customers would travel to similar stores, gyms, and restaurants in the region to fulfill their needs. Therefore, mobile emissions from existing conditions were not subtracted.

[b] To calculate the net change, it was conservatively assumed that the project emissions would be 0.005 ton per year when the reported values were <0.005 ton per year.

Source: A copy of the California Emissions Estimator Model (CalEEMod) report is provided in **Appendix D**.

*Exposure of Sensitive Receptors to Air Pollutants*

*The project would not result in the exposure of nearby sensitive receptors to substantial pollutant concentrations.*

Exposure of sensitive receptors to DPM and PM2.5 emissions from project construction and operation is discussed below. The analysis of other toxic substances that may become airborne, such as naturally occurring asbestos and potential vapor intrusion risk, is presented in *Section 4.8, Hazardous and Hazardous Materials*, of the EIR.

Toxic Air Contaminants from Project Construction

Project construction would generate DPM and PM2.5 emissions from the exhaust of off-road diesel construction equipment and fugitive PM2.5 emissions from construction activities. In accordance with guidance from the BAAQMD and Office of Environmental Health Hazard Assessment

(OEHHA, 2015), a health risk assessment was conducted to estimate the incremental increase in cancer risk and chronic hazard index (HI) to sensitive receptors from DPM emissions during construction. The acute HI for DPM was not calculated because an acute reference exposure level has not been approved by OEHHA and CARB, and the BAAQMD does not recommend analysis of acute non-cancer health hazards from construction activity.

The annual average concentrations of DPM and PM2.5 during construction were estimated within 1,000 feet of the project using the EPA's Industrial Source Complex Short Term (ISCST3) air dispersion model. For this analysis, emissions of exhaust PM10 were used as a surrogate for DPM, which is a conservative assumption because more than 90 percent of DPM is less than 1 micron in diameter. The input parameters and assumptions used for estimating emission rates of DPM and PM2.5 from off-road diesel construction equipment are included in **Appendix D**.

Daily emissions from construction were assumed to occur over the construction hours established by the City of Mountain View from 7:00 AM to 6:00 PM Monday through Friday. The exhaust and fugitive dust from off-road equipment were represented in the ISCST3 model as area sources encompassing the project site.

A uniform grid of receptors spaced 20 meters apart with receptor heights of 1.5 meters (for ground-level receptors) was encompassed around the project site as a means of developing isopleths (i.e., concentration contours) that illustrate the air dispersion pattern from the various emission sources. The ISCST3 model input parameters included one year of BAAQMD meteorological data from Station 7902 located about 10.3 miles southeast of the project site.

Based on the annual average concentrations of DPM and PM2.5 estimated using the air dispersion model (**Appendix D**), potential health risks were evaluated for the maximally exposed individual resident (MEIR) located about 100 feet east of the project site across California Street. The location of the MEIR is shown in **Figure 4.2-1.**

The incremental increase in cancer risk from on-site DPM emissions during construction was assessed for an infant exposed to DPM starting from birth. This exposure scenario represents the most sensitive individual who could be exposed to adverse air quality conditions in the vicinity of the project site. It was conservatively assumed that the MEIR would be exposed to an annual average DPM concentration over the entire estimated duration of construction at each location, which is about 1.5 years (18 months). The input parameters and results of the health risk assessment are included in **Appendix D**.

**Table 4.2-11** summarizes the estimated health risks at the MEIR due to DPM and PM2.5 emissions from project construction and compares them to the BAAQMD's thresholds of significance. The estimated cancer risk and chronic HI for DPM and annual average PM2.5 concentration from construction emissions were below the BAAQMD's thresholds at the MEIR location. Therefore, project construction would not expose sensitive receptors to substantial pollutant concentrations and the impact would be less than significant.

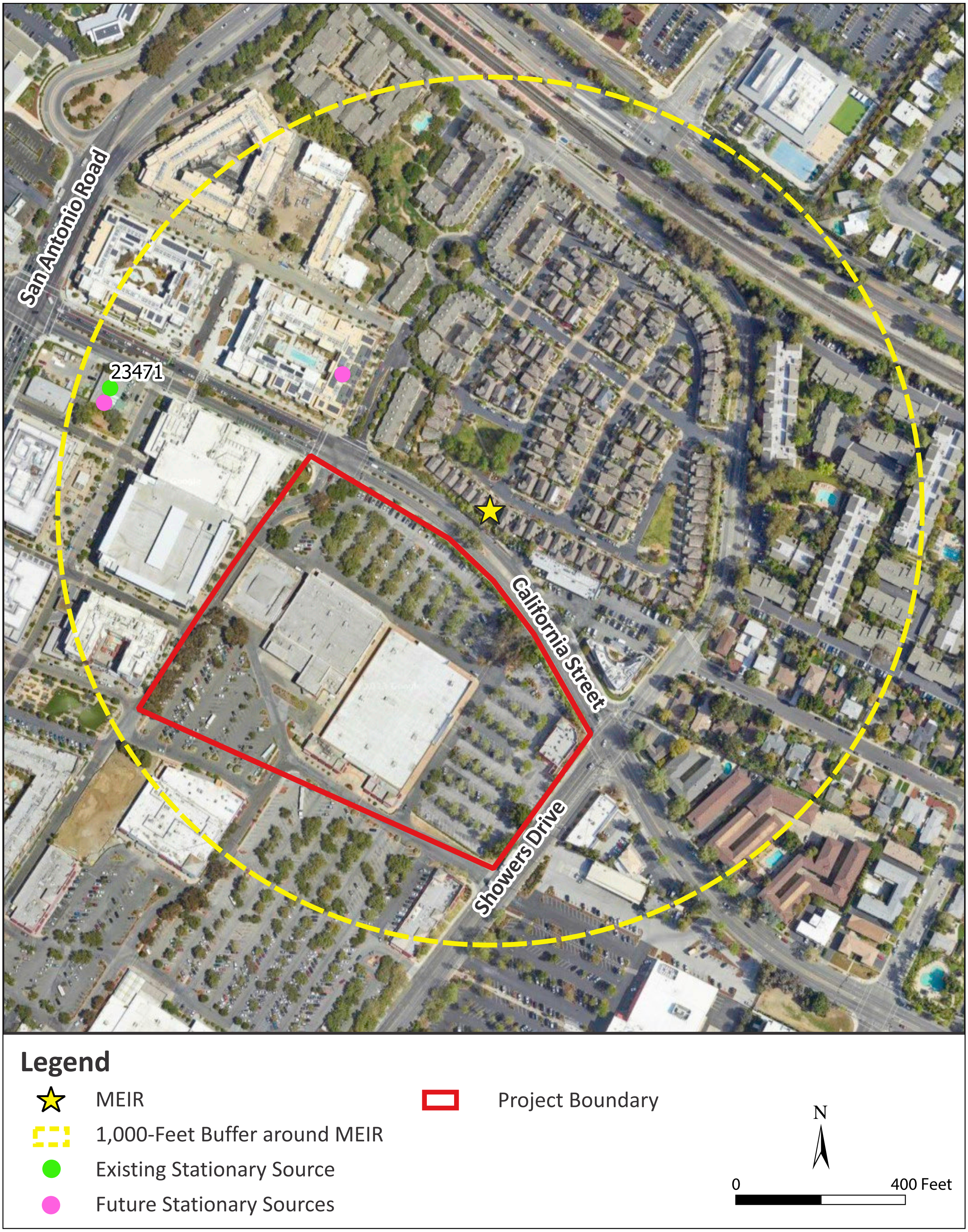


Figure 4.2-1

**CUMULATIVE SOURCES OF TACs and PM2.5 EMISSIONS IN PROJECT VICINITY**

SOURCE: BASELINE Environmental Consulting 2023

**TABLE 4.2-11 HEALTH RISKS AT MAXIMALLY EXPOSED INDIVIDUAL RESIDENT (MEIR) DURING PROJECT CONSTRUCTION**

| | Diesel Particulate Matter | | PM2.5 |
|---|---|---|---|
| **Receptor** | **Cancer Risk (per million)** | **Chronic Hazard Index** | **Annual Average Concentration (μg/m³)** |
| MEIR | 4.2 | <0.01 | 0.10 |
| **BAAQMD Thresholds of Significance** | 10.0 | 1.0 | 0.3 |
| **Threshold Exceedance?** | **No** | **No** | **No** |

Notes: BAAQMD = Bay Area Air Quality Management District; PM2.5 = fine particulate matter; μg/m³ = micrograms per cubic meter
Source: See **Appendix D**.

Toxic Air Contaminants from Project Operation

The proposed project would not add any stationary source (e.g., diesel emergency generator) that would generate TACs such as DPM and PM2.5. Currently, LASD only provides bus service to special education students. Implementation of LASD Policy 3514, which limits unnecessary idling of school buses, would reduce the emissions of diesel exhaust and other air contaminants. Due to the limited school bus service and the implementation of LASD Policy 3514, project operation would not expose sensitive receptors to substantial pollutant concentrations and the impact would be less than significant.

Local Carbon Monoxide Concentrations from Project Operation

The vehicle trips generated by operation of the proposed project could increase localized carbon monoxide (CO) concentrations (also known as hotspots), which could affect sensitive receptors in the local community. The source of local CO concentrations is often associated with heavy traffic congestion, which most frequently occurs at signalized intersections of high-volume roadways. The BAAQMD's threshold of significance for local CO concentrations is the same as the 1- and 8-hour CAAQS of 20.0 and 9.0 parts per million, respectively, because these represent levels that are protective of public health.

The BAAQMD has developed conservative screening criteria that can be used to determine if a project would generate traffic congestion at intersections that could potentially cause or contribute to local CO levels above the CAAQS. According to the BAAQMD, a project would result in a less-than-significant impact related to localized CO concentrations if all of the following screening criteria are met:

- The project is consistent with an applicable Congestion Management Program (CMP) established by the County Congestion Management Agency for designated roads or highways, regional transportation plans, and local congestion management agency plans.
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g.,

tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

As discussed in *Section 4.14, Transportation,* of this EIR, implementation of project would not result in a conflict with the Santa Clara County Congestion Management Program (CMP). Compared to the existing condition (existing commercial buildings operating at full capacity), the project would result in a net increase in trip generation during the AM peak hour (285 more trips) and net decreases during the PM pick-up hour (132 fewer trips) and PM peak hour (642 fewer trips) (Parisi Transportation Consulting, 2023). The expected net increase in traffic volume during the AM peak hour is well below the BAAQMD's screening criteria of 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited. Because the project would not exceed the BAAQMD's screening criteria, local CO concentrations associated with operation of the project would have a less-than-significant impact on nearby sensitive receptors.

*Adverse Effects from Odors and Other Emissions*

*The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.*

As a school development, the project would not be expected to generate significant odors or other emissions for a substantial duration. Therefore, project impacts related to odors and other emissions would be less than significant.

## Potentially Significant Impacts

*Emissions of Fugitive Dust during Project Construction*

**Impact AIR-1: Soil disturbance during project construction would generate fugitive dust coarse particulate matter (PM10) and fine particulate matter (PM2.5) emissions that could result in a cumulatively considerable net increase in criteria air pollutants for which the region is in nonattainment. (PS)**

The generation of fugitive dust PM10 and PM2.5 emissions from soil disturbance activities during project construction could result in a cumulatively considerable net increase in regional PM10 and PM2.5 concentrations. Emissions of fugitive dust PM10 and PM2.5 during project construction were estimated using the CalEEMod input parameters summarized in Table 4.2-5 and additional assumptions summarized in in Table 4.2-6. Averaged over the total working days (351 days), the project's estimated emissions for fugitive dust PM10 and PM2.5 during construction were 2.4 pounds per day and 0.6 pound per day, respectively. The BAAQMD does not have a quantitative threshold of significance for fugitive dust PM10 and PM2.5 emissions; however, the BAAQMD considers implementation of best management practices to control dust during construction sufficient to reduce air quality impacts from fugitive dust to a less-than-significant level. The BAAQMD's recommended best management practices for controlling dust are included in Mitigation Measure AIR-1, below.

Implementation of Mitigation Measure AIR-1 would ensure that emissions of PM10 and PM2.5 from dust generated during project construction activities would not result in a cumulatively considerable net increase in criteria air pollutants for which the region is in nonattainment and therefore would reduce the impact to less than significant.

> *Mitigation Measure AIR-1: During project construction, the contractor shall implement a dust control program that includes the following measures recommended by the Bay Area Air Quality Management District (BAAQMD) and these measures shall be included in contract specifications for the project:*
>
> - *All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.*
> - *All haul trucks transporting soil, sand, or other loose material off-site shall be covered.*
> - *All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.*
> - *All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).*
> - *All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.*
> - *Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by California Airborne Toxic 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.*
> - *A publicly visible sign shall be posted with the telephone number and person to contact at the Lead Agency (the Los Altos School District) regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations. (LTS)*

## Cumulative Impacts

This analysis evaluates whether the impacts of the proposed project, together with the impacts of other pending projects, would result in a cumulatively significant impact with respect to air quality. This analysis then considers whether or not the incremental contribution of the impacts associated with implementation of the proposed project would be significant. Both conditions must apply for a project's cumulative effects to rise to the level of a significant impact. For air quality, the geographic scope for assessing cumulative impacts includes air emissions sources within 1,000 feet of the project site.

*Increases in Criteria Air Pollutants*

According to the BAAQMD, regional air pollution is largely a cumulative impact. No single project is sufficient in size to independently create regional nonattainment of ambient air quality standards. The BAAQMD's thresholds of significance for criteria air pollutants were designed to represent levels above which a project's individual emissions would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. Since construction and operation of the proposed project would not exceed the BAAQMD's thresholds of significance for criteria air pollutants (including ozone precursors) with the implementation of Mitigation Measure AIR-1, the cumulative impacts on regional air quality would be less than significant.

*Exposure of Sensitive Receptors to Air Pollutants*

In addition to a project's individual TAC emissions during construction and operation, the potential cumulative health risks to the MEIR from existing and reasonably foreseeable future sources of TACs were evaluated to represent the worst-case-exposure scenario for sensitive receptors in the project vicinity.

The BAAQMD's online screening tools were used to provide conservative estimates of how much existing and foreseeable future TAC sources would contribute to cancer risk, HI, and PM2.5 concentrations. The individual health risks associated with each source were summed to find the cumulative health risk at the MEIR. The supporting health risk calculations are included in **Appendix D**.

Based on the BAAQMD's 2023 permitted stationary source risk map, there is one existing stationary source within 1,000 feet of the MEIR: MGP IX SAC II Properties LLC (Plant 23471). Preliminary health risk screening values at the MEIR were determined using the 2018 permitted stationary source inventory data (BAAQMD, 2023c) and BAAQMD Health Risk Calculator with Distance Multipliers (Beta Version 5.0). In addition, there are two future developments located within 1,000 feet of the MEIR that could require an emergency generator or other stationary source of TACs: (1) 365 San Antonio Road and 2585-2595 California Street, and (2) 2580 and 2590 California Street/201 San Antonio Circle. It was conservatively assumed that both developments would involve operation of an emergency diesel generator. The future development at 365 San Antonio Road and 2585-2595 California Street could replace the existing stationary source located at the same site. To be conservative, both the existing stationary source and the future developments were considered in this analysis. The locations of the existing stationary source and the future developments are shown in **Figure 4.2-1.**

Preliminary health risk screening values at the MEIR from exposure to mobile sources of TACs were estimated based on the BAAQMD's Mobile Source Screening Map for roadway, rail, and railyard (BAAQMD, 2023d), which provides conservative health estimates reflective of 2022 for residents living near roadways, rail lines, and rail yards.

Estimates of the cumulative health risks at the MEIR are summarized and compared to the BAAQMD's cumulative thresholds of significance in **Table 4.2-12**. The estimated cancer risk and chronic HI for DPM and annual average PM2.5 concentration were below the BAAQMD's cumulative thresholds. Therefore, the project's emissions of DPM and PM2.5 during construction would have a less-than-significant cumulative impact on nearby sensitive receptors.

*Adverse Effects from Odors and Other Emissions*

As discussed previously, the project is a school development and hence would not be expected to generate significant odors for a substantial duration. Therefore, the project would not make a significant contribution to cumulative air quality impacts of odors and other emissions.

**TABLE 4.2-12 SUMMARY OF CUMULATIVE HEALTH RISKS AT MAXIMALLY EXPOSED INDIVIDUAL RESIDENT (MEIR)**

| Source | Source Type | Method Reference | Cancer Risk (per million) | Chronic Hazard Index | PM2.5 (µg/m³) |
|---|---|---|---|---|---|
| **Project** | | | | | |
| Off-Road Construction Equipment | Diesel Exhaust | | 4.2 | <0.01 | 0.10 |
| **Existing Stationary Sources** | | | | | |
| MGP IX SAC II Properties LLC (Plant 23471) | Diesel Generator | 1,2 | 0.07 | <0.01 | <0.01 |
| **Existing Mobile Sources** | | | | | |
| Roadway | Mobile | 3 | 12.8 | 0.05 | 0.33 |
| Rail and Railyard | Rail | 3 | 19 | 0.01 | 0.03 |
| **Future Stationary Sources** | | | | | |
| 365 San Antonio Road and 2585-2595 California Street | Diesel Generator | 2,4 | 0.4 | <0.01 | <0.01 |
| 2580 and 2590 California Street/ 201 San Antonio Circle | Diesel Generator | 2,4 | 1.4 | <0.01 | <0.01 |
| **Cumulative Health Risks** | | | 38 | <0.1 | 0.5 |
| **BAAQMD Cumulative Thresholds** | | | 100 | 10.0 | 0.8 |
| **Exceed Thresholds?** | | | **No** | **No** | **No** |

Notes: BAAQMD = Bay Area Air Quality Management District; PM2.5 = fine particulate matter; µg/m³ = micrograms per cubic meter
Health risk screening values derived using the following BAAQMD tools and methodologies:
1) BAAQMD's 2018 stationary source emissions data.
2) BAAQMD's Diesel Internal Combustion Engine Distance Multiplier Tool.
3) BAAQMD Beta version Mobile Source Screening Map for roadways, rail lines, and railyards.
4) BAAQMD's Risk and Hazards Emissions Screening Calculator (Beta Version 5.0).
Source: See **Appendix D**.

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# 4.3 BIOLOGICAL RESOURCES

## INTRODUCTION

This section evaluates the project's potential impacts on biological resources. Given the developed nature of the project site, the analysis focuses on the potential impacts of proposed tree removal.

## ENVIRONMENTAL SETTING

The project site has been developed with commercial buildings, surface parking lots, and urbanized landscaping. An arborist's report was prepared for the Los Altos School District (LASD) to identify and assess existing trees at the site, given that about 150 trees are proposed for removal (Fouts, 2022). A total of 193 trees on or near the project site were surveyed. A few of those may be within the City of Mountain View right-of-way but almost all trees are within the boundaries of the site. Of the 193 trees surveyed, 90 were found to be "heritage trees" as defined by the City of Mountain View. The heritage trees include London plane tree, flowering ornamental pear, river red gum, liquidambar, and coast live oak.

Many of the flowering ornamental pear trees were found to have a crowded branch structure which has led to limb breakage. Many of the liquidambars were topped, with deadwood and decay where they were pruned. Tip dieback was found in many trees (e.g., London plane tree, ornamental pear, red gum eucalyptus, and liquidambar) and is cited as a common symptom from a prolonged shortage of water. Many of the London plane trees were found to be infected with a foliar fungal disease which causes leaf and twig dieback. Fire blight, a bacterial pathogen, was found on many of the flowering ornamental pears.

## REGULATORY FRAMEWORK

Local, state, and federal regulations have been enacted to provide for the protection and management of sensitive biological and wetland resources. This section outlines the key local, state, and federal regulations that apply to these resources.

### Overview of Relevant Federal Regulations

The U.S. Fish and Wildlife Service (USFWS) is responsible for protection of terrestrial and freshwater organisms through implementation of the Federal Endangered Species Act (FESA) (16 U.S.C. Section 1531, *et seq.*) and the Migratory Bird Treaty Act (MBTA) (16 U.S.C. Section 703, *et seq.*). The MBTA makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to federal regulations or pursuant to certain regulatory exceptions. The National Marine Fisheries Service (NOAA Fisheries) is responsible for protection of anadromous fish and marine wildlife under the FESA and Marine Mammal Protection Act. The U.S. Army Corps of Engineers (Corps) has primary responsibility for protecting wetlands under Section 404 of the Clean Water Act (CWA). The Corps also regulates navigable waters under Section 10 (33 U.S.C. 403) of the Rivers and Harbors Act.

Nests of most bird species are protected under the federal MBTA when the nests are in active use, and nests of raptors (birds-of-prey) are also protected under Section 3503 of the California Fish and Game Code when the nests are in active use. No nesting or roosting locations were observed during the field reconnaissance survey of the project site in March 2023. However, mature trees on the site contain suitable nesting substrate for some bird species recognized as Species of Special Concern (SSC) by the California Department of Fish and Wildlife (CDFW), as well as more common species, and new nests could be established in the future. Species considered to have some potential for nesting on the site include Cooper's hawk (*Accipiter cooperi*), sharp-shinned hawk (*Accipiter striatus*), white-tailed kite (*Elanus caeruleus*), and loggerhead shrike (*Lanius ludovicianus*), as well as more common raptor species such as great horned owl (*Bubo virginianus*), red-tailed hawk (*Buteo jamaicensis*), and American kestrel (*Falco sparverius*). More common passerine bird species could also potentially nest on the site.

## Overview of Relevant State Regulations

The CDFW is responsible for administration of the California Endangered Species Act (CESA) (California Fish and Game Code, Section 2050, *et seq.*) and for protection of streams and water bodies through the Streambed Alteration Agreement process under Section 1600, *et seq.,* of the California Fish and Game Code.

Certification from the Regional Water Quality Control Board (RWQCB or Regional Water Board) is also required when a proposed activity may result in discharge into navigable waters, pursuant to Section 401 of the CWA and U.S. Environmental Protection Agency (USEPA) Section 404(b)(1) Guidelines. Under the Porter-Cologne Water Quality Control Act, the RWQCB also has jurisdiction over waters of the state not regulated by the Corps.

## Federal and State Regulations for Special-Status Species

Special-status species are plants and animals that are legally protected under the FESA and CESA, the MBTA, the California Fish and Game Code (Sections 3503, 3503.5, 3511, 3513, 3515, and 4700), or other regulations. In addition, pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15380, special-status species also include other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat. These include species recognized by the CDFW as Species of Special Concern, and plant species maintained on Lists 1A and 1B of the California Native Plant Society (CNPS) *Inventory*. Species with legal protection under the FESA and CESA often represent major constraints to development, particularly when the species are wide ranging or highly sensitive to habitat disturbance and where proposed development would result in a take of these species.

## Federal and State Regulations for Wetlands

Although definitions vary to some degree, wetlands are generally considered to be areas that are periodically or permanently inundated by surface or ground water and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and flood waters, and water recharge, filtration, and purification functions. The CDFW, Corps, and RWQCB have jurisdiction over modifications to riverbanks, lakes, stream channels, and other wetland features. Technical standards for delineating wetlands have been developed by the Corps and the USFWS. These standards generally define wetlands through consideration of three criteria: hydrology, soils, and vegetation.

The CWA was enacted to address water pollution, establishing regulations and permit requirements regarding construction activities that affect storm water, dredge, and fill material operations, and water quality standards. The regulatory program requires that discharges to surface waters be controlled under the National Pollutant Discharge Elimination System (NPDES) permit program, which applies to sources of water runoff, private developments, and public facilities.

Under Section 404 of the CWA, the Corps is responsible for regulating the discharge of fill material into waters of the United States. The term "waters" includes wetlands and non-wetland bodies of water that meet specific criteria as defined in Part 328 of Title 33 in the Code of Federal Regulations (U.S. Government, Federal Code of Regulations, 2016). All three of the identified technical criteria must be met for an area to be identified as a wetland under Corps jurisdiction unless the area has been modified by human activity. In general, a permit must be obtained before fill can be placed in wetlands or other waters of the United States. The type of permit is determined by the Corps depending on the amount of acreage and the purpose of the proposed fill.

Jurisdictional authority of the CDFW over wetland areas is established under Section 1600 of the California Fish and Game Code, which pertains to activities that would disrupt the natural flow or alter the channel, bed, or bank of any lake, river, or stream. The Fish and Game Code stipulates that it is unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake without notifying the CDFW, incorporating necessary mitigation, and obtaining a Streambed Alteration Agreement. The Wetlands Resources Policy of the CDFW states that the Fish and Wildlife Commission will strongly discourage development in or conversion of wetlands, unless, at a minimum, project mitigation assures there will be no net loss of either wetland habitat values or acreage. The CDFW is also responsible for commenting on projects requiring Corps permits under the Fish and Wildlife Coordination Act of 1958 (16 U.S.C. Section 661, *et seq.*).

In addition, the RWQCB is responsible for upholding state water quality standards. Pursuant to Section 401 of the CWA, projects that apply for a Corps permit for discharge of dredge or fill material, and projects that qualify for a Nationwide Permit, must obtain water quality certification from the RWQCB. The RWQCB is also responsible for regulating wetlands under the Porter-Cologne Water Quality Control Act (California Water Code, Section 13000, *et seq.*); these wetlands may include hydrologically isolated wetlands no longer regulated by the Corps under Section 404 of the CWA. Federal Supreme Court rulings have limited Corps jurisdiction, but the RWQCB in some cases continues to exercise jurisdiction over these features under the Porter-Cologne Water Quality Act (California Water Boards, 1969).

## Local Regulations and Policies

LASD is exempt from local land use controls, but these are identified herein for purposes of background information.[1]

*Mountain View Municipal Code*

Chapter 32 of the Mountain View Municipal Code addresses "Protection of the Urban Forest" and defines heritage trees. Heritage trees are those defined in the Municipal Code Chapter 32, Section 32.23 as the following (City of Mountain View, 2023):

- Any tree with a trunk diameter of 4 feet (48 inches) in diameter or larger, measured at 54 inches above grade;
- A multi-branched tree which has major branches below 54 inches above the natural grade with a circumference of 48 inches measured just below the first major trunk fork;
- Any *quercus* (oak), *sequoia* (redwood), or *cedrus* (cedar) tree with a circumference of 12 inches or more when measured at 54 inches above natural grade; or
- Tree or grove of trees designated by city council to be of historical value or of significant community benefit.

A permit is required for the removal of heritage trees. Such permits impose specific conditions for tree removal and/or replacement. However, LASD has exempted itself from local land use controls; therefore, a permit would not be required.

*Mountain View General Plan*

City of Mountain View General Plan policies that would apply to the project and were adopted for the purpose of avoiding or mitigating an environmental impact as related to biological issues include the following:

Policy LUD 10.7: *Beneficial landscaping options.* Promote landscaping options that conserve water, support the natural environment and provide shade and food.

Policy POS 12.1: *Heritage trees.* Protect trees as an ecological and biological resource.

Policy POS 12.2: *Urban tree canopy.* Increase tree canopy coverage to expand shaded areas, enhance aesthetics and help reduce greenhouse gases.

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

Policy POS 12.5: *Salt-tolerant vegetation.* Promote the use of salt-tolerant vegetation that can use recycled water.

[1] LASD adopted Resolution No.22/23-13 on April 3, 2023, pursuant to Section 53094 of the California Government Code, exempting the project from any zoning ordinances or regulations of the City of Mountain View, including, without limitation, the City's Municipal Code, the City's General Plan, and related ordinances and regulation that otherwise would be applicable.

Policy POS 13.2: *Gardens at schools.* Collaborate with school districts to create edible gardens and landscaping on school property.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Significance Criteria

For the purposes of this Environmental Impact Report (EIR), the project would have a significant impact on biological resources if it would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS;

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The following significance criteria would not apply to the proposed project and are therefore excluded from further discussion in this impact analysis:

- *Have a substantial adverse effect on any riparian habitat or other sensitive natural community.* Riparian habitats and sensitive natural community types are absent from the project site.
- *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*. Wetlands are absent from the project site.
- *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 such plans encompassing the project site or vicinity have been adopted.

### Less-than-Significant Impacts

*The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*

The project's proposed removal of 150 trees has the potential to conflict with City of Mountain View policies and ordinances regarding the removal of heritage trees, but proposed tree planting would compensate for this removal. While 150 trees would be removed from the site to make room for the new school buildings, at least 100 new trees are proposed to be planted in and at the edge of the campus. Wherever possible, existing street trees would be protected. Street trees would also line the interior roadway serving the site and the interior school parking area.

The 150 trees proposed for removal include up to 90 heritage trees, but many of these heritage trees have been identified as being in poor condition (Fouts, 2022) and some of these would be protected with the proposed site plan. For example, LASD is working to retain the mature coast live oaks along Showers Drive. LASD is exempt from local land use controls by way of Resolution Number 2223-13 adopted April 3, 2023. With the proposed planting of 100 new trees, the lost heritage trees would be replaced at a greater than 1:1 ratio, and no additional mitigation measure would be required. A total of 10 heritage trees along Pacchetti Way are proposed for retention.

### Potentially Significant Impacts

**Impact BIO-1: Development of the proposed school may result in adverse impacts on nesting birds, if present on the project site. Thus, the project could have a substantial adverse effect on species identified as a candidate, sensitive, or special-status species. (PS)**

No special-status species are suspected to occur in the developed areas of the site and no habitat for native or migratory fish or wildlife is present at the site, but there remains a potential for new bird nests that could be inadvertently destroyed or abandoned during construction. The mature trees, landscaping, and even the exterior of the existing buildings to be demolished or rehabilitated could be used for nesting by birds, including raptors and more common species. The MBTA prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior; this prohibition includes whole birds, parts of birds, and bird nests and eggs. Tree removal, building demolition, and other construction activities during the breeding season could result in the incidental loss of fertile eggs or nestlings or nest abandonment. This would be considered a potentially significant impact.

A standard method to address the potential for nesting birds is either to initiate construction during the non-nesting season, which in Mountain View is typically from September 1 to January 31, or to conduct a nesting survey within 14 days prior to initial tree removal, building demolition, and construction to determine whether any active nests are present that must be protected until any young have fledged and are no longer dependent on the nest. Protection of the nests, if present, would require that construction setbacks be provided during the nesting and fledging period, with the setback depending on the type of bird species, degree to which the individuals have already acclimated to other ongoing disturbance, and other factors. Without these controls, construction of the project could have a potentially significant impact on nesting birds.

*Mitigation Measure BIO-1: Adequate measures shall be taken to avoid inadvertent take of raptor nests and other nesting birds protected under the Migratory Bird Treaty Act when nests are in active use. This shall be accomplished by taking the following steps:*

- *If construction is proposed during the nesting season (February through August), a focused survey for nesting raptors and other migratory birds shall be conducted by a qualified biologist within 14 days prior to the onset of vegetation removal or construction* *in order to identify any active nests on the project site and in the vicinity of proposed construction.*

- *If no active nests are identified during the survey period, or if development is initiated during the non-breeding season (September through January), construction may proceed with no restrictions.*
- *If bird nests are found, an adequate setback shall be established around the nest location and construction activities restricted within this no-disturbance zone until the qualified biologist has confirmed that any young birds have fledged and are able to function outside the nest location. Required setback distances for the no-disturbance zone shall be based on input received from the California Department of Fish and Wildlife (CDFW) and may vary depending on species and sensitivity to disturbance. As necessary, the no-disturbance zone shall be fenced with temporary orange construction fencing if construction is to be initiated on the remainder of the development site.*
- *A report of findings shall be prepared by the qualified biologist and submitted to the Los Altos School District (LASD) for review and approval prior to initiation of construction within the no-disturbance zone during the nesting season (February through August). The report either shall confirm absence of any active nests or shall confirm that any young within a designated no-disturbance zone have fledged and construction can proceed.*

*The combination of the above measures would reduce this potential impact to less than significant. (LTS)*

### Cumulative Impacts

Table 6-1 in *Chapter 6, Other CEQA Considerations*, of this EIR identifies the variety of land uses that are pending or approved in the surrounding area. While some biological impacts could occur with these additional developments, especially as related to removal of trees or potential impacts on birds protected by the MBTA, the project would not contribute to this cumulative impact and it is assumed that the other projects would also be required to implement mitigation measures to reduce impacts on biological resources.

## REFERENCES

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# 4.4 CULTURAL RESOURCES

## INTRODUCTION

This section of the Draft Environmental Impact Report (EIR) describes the potential impacts of the project on cultural resources. Cultural resources are sites, buildings, structures, objects, and districts that may have traditional or cultural value for their historical significance. Examples of cultural resources include pre-contact Native American and historic-period (post-1769) archaeological sites, and historic buildings and structures, districts, and landscapes. The California Environmental Quality Act (CEQA) requires that agencies considering projects that are subject to discretionary action consider the potential impacts on cultural resources that may occur from project implementation (see Section 15064.5 and Appendix G of the CEQA Guidelines).

This section describes existing cultural resources conditions at the project site and the pertinent state and City of Mountain View (City) laws and regulations related to cultural resources.[1] Potentially significant adverse impacts that could result from project implementation are described, and mitigation measures to reduce these impacts to less-than-significant levels are identified, as appropriate.

## ENVIRONMENTAL SETTING

The information in this section is derived from *Cultural Resources Inventory and Evaluation Report, Los Altos School District, Site No. 10 Mountain View, Santa Clara County, California* (Horizon Water and Environment, 2023).

### Pre-Contact Native American Setting

The pre-contact (or prehistoric) era of the project area reflects information known about the indigenous population from the time the region was first populated with humans until the arrival of the first Europeans, who visited and recorded their journeys through the written record. The pre-contact record is derived from over a century of archaeological research, and while much has been gleaned from these studies, large gaps in the data record remain. The following pre-contact culture sequence, derived from Milliken et al. (2010:114-118), briefly outlines the prehistory of the San Francisco Bay region.

The Early Holocene (Lower Archaic; 8000 to 3500 B.C.) is considered a time when populations continued to be very mobile as they practiced a foraging subsistence pattern around the region. Artifacts that characterize this period include the milling slab and handstone to process seeds, as well as large wide-stemmed and leaf-shaped projectile points.

The Early Period (Middle Archaic; 3500 to 500 B.C.) is marked by the appearance of cut shell beads in the archaeological record, as well as the presence of the mortar and pestle for processing

[1] As allowed by state law, the Los Altos School District (LASD) has approved a resolution exempting itself from City of Mountain View regulations. This is Resolution No. 22/23-13 passed by the LASD Board of Trustees on April 3, 2023.

acorns. House floors with postholes indicate substantial living structures, suggesting a move toward establishing a more sedentary lifestyle and an increasing population.

The Middle Period, which includes the Lower Middle Period (Initial Upper Archaic; 500 B.C. to A.D. 430) and Upper Middle Period (Late Upper Archaic; A.D. 430 to 1050), appears to be a time when geographic mobility may have continued, although groups began to establish longer-term base camps in localities from which a more diverse range of resources could be exploited. The first rich black middens are recorded from this period. The addition of milling tools, obsidian and chert concave-base projectile points, and the occurrence of sites in a wider range of environments suggest that the economic base was more diverse. By the Upper Middle Period, mobility was being replaced by the development of numerous small villages. Around A.D. 430 a "dramatic cultural disruption" occurred, as evidenced by the sudden absence of previously common trade items such as shell beads.

The Initial Late Period (Lower Emergent; A.D. 1050 to 1550) reflects a social complexity that had developed toward lifeways of large, central villages with resident political leaders and specialized activity sites. Artifacts associated with the period include the bow and arrow, small corner-notched projectile points, and a diversity of beads and ornaments.

The Terminal Late Period (Upper Emergent; A.D. 1550 to circa 1750) generally represents the period when indigenous cultures were encountered by the Spanish when they first arrived in San Francisco Bay.

## Ethnography

The population indigenous to the project area spoke a language referred to as Costanoan, a derivative from a Spanish term for "coast people." Costanoan, which consisted of six known languages and various dialects within those languages, was spoken over a broad territory that included all of the San Francisco Peninsula and all lands along the east and south of San Francisco Bay, and that extended south to include Monterey Bay, Salinas Valley, and the area around Hollister. The Costanoan peoples, who are referred to as the Ohlone, Mutsun, or Rumsen, depending on geography, were not a united cultural or political entity (Milliken et al., 2009:2-4). Rather, there were strong differences, not only in language but also in culture, between the San Francisco and Monterey Bay occupants, and political affinity was based on the tribelet, which comprised one or more villages within a specific geographic territory (Levy, 1978:487). Those residing in the project area likely spoke the Ramaytush dialect of San Francisco Bay Costanoan, who occupied the San Francisco Peninsula (Milliken et al., 2009:6).

When Spanish explorers and missionaries first arrived in the Mountain View area in the latter half of the 18th century, the area was inhabited by the Puichon people, who were the largest Ramaytush-speaking community on the peninsula with a total population of about 420 members (Milliken et al. 2009:67). The Puichons resided in villages along permanent streams in locations that allowed access to the diverse resources found in the tidal marshlands, the valley floor, and the hills. (Milliken et al. 2010:106; Moratto 2004:225). The largest Puichon villages were along San Francisquito Creek. The Puichon were forcibly removed to both Mission Dolores (in San Francisco) and Mission Santa Clara (in Santa Clara) between 1871 and 1805 (Milliken et al., 2009:294).

## Historic Period Setting

*Spanish and Mexican Periods*

The historic era began in the San Francisco Bay area when Spanish explorers arrived in the late 1760s and the 1770s. Members of the Portola expedition were the first to arrive in present-day Santa Clara County, arriving on the San Francisco Peninsula in October 1769 where they were welcomed by the local Costanoan people. Portola's group continued northward, encountering and staying at villages of all the peninsula tribes as they crossed to the bay side of the peninsula via Sweeney Ridge and camped near Palo Alto by the middle of November. Following Portola's exploration, the Rivera-Palou expedition followed five years later, in 1774. Instead of coming up the coast, the Rivera-Palou party arrived through Santa Clara Valley and followed along the bay shore to San Francisquito Creek in modern-day Palo Alto. The Spanish soon returned and established the Mission San Francisco de Asis (commonly known as Mission Dolores) and the Presidio of San Francisco in 1776. Soon thereafter, Mission Santa Clara de Asis was founded at the south end of San Francisco Bay on the Guadalupe River in present-day Santa Clara (Kyle et al., 2002). Due to the heavy presence of the Spanish in the region, by 1793, the area encompassing the peninsula was no longer inhabited by tribal villages, as most of the population had been taken to the missions (Milliken et al., 2009:87).The influx of the Spanish caused the decline in indigenous communities not only by forced recruitment into the missions, but also due to newly introduced diseases and the detrimental effects to native plants and wildlife used for subsistence from the establishment of ranches and logging practices developed to sustain the missions and presidios.

Mexico, which included California, became independent from Spain in 1822, and after that time, the government Budget for Belvedere Levee Improvements EIR 2024.xlsx of land to favored citizens. In 1842, the Mexican government granted the 9,066-acre Rancho Pastoría de las Borregas, which included the Sunnyvale and Mountain View areas, to Francisco Estrada, who died soon thereafter. The property eventually passed to his father-in-law, Mariano Castro.

*The American Period and Mountain View*

In 1848, California became a U.S. territory and, shortly thereafter, massive numbers of Gold Rush hopefuls began to arrive by land and by sea. San Francisco was a primary portal for receiving newcomers into California and many arrivals elected to stay in the Bay Area as entrepreneurs, rather than make their way to the Mother Lode. The region quickly became an industrial, commercial, and agricultural center in California, which became a state in 1850.

The settlement that is now Mountain View began in 1852 as a stagecoach stop along El Camino Real, which quickly grew into a village. The Mountain View School District was formed in 1854 and the first public school opened in 1857. Shipping investors began building docks to ship produce and grain across the San Francisco Bay in the 1860s. In 1864, the San Francisco and San Jose Railroad was completed on the Rancho Pastoría de las Borregas, a half-mile north of the existing village, and a new community sprang up around the railroad stop. The Castro family was given its own depot and Crisanto Castro laid out a "New Mountain View" around the railroad. (Mountain View and New Mountain View remained distinct communities until the mid-20th century.) Large waves of immigrants from China, Italy, Portugal, and Japan, among other countries, settled in the area, working in farming and the canning industry; Mountain View would remain a notably diverse city for decades. In 1902, the City of Mountain View was incorporated. The next year, the Seventh-

Day Adventist Pacific Press moved its headquarters to Mountain View, bringing with it dozens of families that settled and reshaped the western edge of the town. In 1906, the nearby San Francisco earthquake destroyed many buildings in Mountain View and caused significant damage, but no known deaths (*Mercury News,* 2007; Perry, 2006).

In 1933, the Moffett Field Naval Air Station opened at the border of Sunnyvale and Mountain View to serve as a base for dirigibles. The NASA (called NACA at the time) Ames Research Center opened in 1939. These two facilities provided hundreds of jobs and began to shift the economy away from agriculture by bringing in scientists and technology researchers. After World War II, a wave of returning veterans settled there and spurred the growth of suburbs. Bayshore Highway/Highway 101 was completed in 1937. (It was converted to a freeway by 1967.)

Developer R. D. Northcutt began construction of the San Antonio Shopping Center in 1953, initiating the transformation of the rural San Antonio District from an agricultural area to a commercial and residential neighborhood. In 1956, William Shockley established the Shockley Semiconductor Laboratory in an apricot storage barn on San Antonio Road near the shopping center; as the first silicon-device research facility, it would profoundly change Mountain View and the surrounding area. In their first stages of development, both the shopping center and the semiconductor laboratory were surrounded by orchards and open fields, although construction of residential subdivisions was already underway in the area. The San Antonio District was among the unincorporated areas on the edges of Mountain View that were annexed in the post-World War II period as their orchards were replaced with shopping centers, residential subdivisions, and apartment buildings (Perry, 2006).

Population continued to grow in the 1950s and 1960s (from 6,563 in 1950 to 54,131 in 1970), as Mountain View developed from an agricultural area to a suburb. Several more technology companies were founded nearby in the 1960s as computing technology progressed, and the area was dubbed “Silicon Valley” in 1971. By the 1980s, Silicon Valley was the heart of the computer industry, and technology campuses replaced the last farms in Mountain View. Downtown Mountain View and other older neighborhoods were redeveloped in the 1990s, with townhouses and other high-density housing replacing the single-family residences of the immediate post-war era to accommodate continuing population growth. Shopping malls and strip malls were also repurposed or demolished and replaced during this era. The Moffett Naval Air Station closed in 1991, and Google moved to Mountain View in 1999, bookending the decade with the end of the defense industry and the increasing dominance of the technology industry (*Mercury News*, 2007).

## Project Site Setting

A cultural resources study of the 11.7-acre project site was conducted by Horizon Water and Environment (recently acquired by Montrose Environmental Solutions), who conducted archival research as well as a field review of the project area. The following information is extracted from the resultant Cultural Resources Inventory and Evaluation Report (Horizon Water and Environment, 2023).

*Archival Research*

A records search for the project site and a quarter-mile buffer was conducted by the Northwest Information Center (NWIC) of the California Historical Resources Information System at Sonoma

State University in August 2022 (NWIC File No.: 22-0047). The record search did not identify any previously recorded cultural resources within the project site,[2] although two buildings have been recorded within the quarter-mile search radius, and one Native American archaeological site sits on the search radius boundary. Both of the buildings were recommended as not eligible for listing in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR). The NRHP/CRHR eligibility status of the Native American archaeological site appears undetermined.

The record search also indicated that the project site has previously been studied as part of a Specific Plan for the entire San Antonio Center (LSA, 2010). A second study (Basin Research, 1993) has been conducted along Showers Drive, which abuts the project site on the east. Two studies were entirely within the quarter-mile search buffer, while an additional 11 studies overlapped the outer boundary of the quarter-mile search buffer.

Other sources of information reviewed included, but were not limited to, the current listings of properties on the NRHP, California Historical Landmarks, CRHR, California Points of Historical Interest as listed in the Office of Historic Preservation's (OHP's) Historic Property Directory, and the Built Environment Resource Directory for Santa Clara County available at the OHP website. A review of the City of Mountain View Register of Historic Resources (City of Mountain View, 2017) indicated that no buildings listed on the register are within the project site or within the 0.25-mile buffer.

Native American tribes were contacted for information about the potential for tribal cultural resources within the project study area, as fully described in *Section 4.15, Tribal Cultural Resources,* of this Draft EIR. No tribal cultural resources were identified as the result of this effort.

*Archaeological/Geoarchaeological Study and Results*

Because the entire project site is developed and no original ground is visible, an archaeological pedestrian survey was not conducted. Instead, the study involved a geoarchaeological analysis of the location's potential to yield buried cultural materials. A model for predicting a location's sensitivity for buried Native American archaeological sites was formulated by Byrd et al. (2017) based on the age of the landform, slope, and proximity to water. A location is considered to have the highest sensitivity if the landform dates to the Holocene, has a slope of 5 percent or less, is within 150 meters (500 feet) of fresh water, and is within 150 meters (500 feet) of a confluence. A basic premise of the model is that Native American archaeological deposits will not be buried within landforms that predate human colonization of the area. Calculating these factors using the buried site model (Byrd et al., 2017: Tables 11 and 12), a location's sensitivity was scored on a scale of 1 to 10 and classified as follows: lowest (<1), low (1 to 3), moderate (3 to 5.5), high (5.5 to 7.5), and highest (>7.5).

Based on landform age and the other factors described above, Byrd et al. (2017) determined that the sensitivity for buried sites at the location of the project site is considered low. Moreover, a review of Witter et al. (2006), a quaternary geology review of the Bay Area from which the Byrd et al. (2017) analysis is partially derived, indicates that the project site is underlain by the Latest Pleistocene (20,000 years ago to 11,700 years ago). This suggests that the location is underlain by

[2] The project study area includes the 11.69-acre project site.

a landform that would not have likely supported substantial human activity due to the antiquity of the landform as pre-dating known human occupation for the area.

*Built Environment Study and Results*

On July 26, 2022, a field review of the extant buildings at the project site was conducted by an architectural historian who meets the U.S. Secretary of the Interior's professional standards in architectural history and history. The project site contains the San Antonio Shopping Center (north), which includes three large buildings and several smaller attached buildings. The outsides of each building were photographed from the public right-of-way; interiors of the buildings were not examined. The San Antonio Shopping Center (north), described below, was recorded on a State of California Department of Parks and Recreation (DPR) form 523 and evaluated for NRHP/CRHR eligibility. The complete DPR form with the entire detailed evaluation analyses is provided in **Appendix E.**

The San Antonio Shopping Center (north) sits on an 11.695-acre property at the northern end of the larger San Antonio Shopping Center complex. It holds three large historic-era (more than 50 years of age) commercial buildings and several smaller buildings surrounded by expansive parking areas. It is bounded on the west, north, and east by Pacchetti Way, California Street, and Showers Drive; an interior road just south of the three buildings separates the property from the southern portion of the San Antonio Shopping Center. The San Antonio Shopping Center (north) includes a small non-historic-era (less than 50 years of age) commercial building at the corner of California Street and Showers Drive. The historic-era buildings included in the San Antonio Shopping Center (north) are described below.

<u>350 Showers Drive (Assessor's Parcel Number [APN] 148-22-012)</u>

This building was originally constructed in 1974 as a Mervyn's department store; it currently is a Kohl's department store. It is comprised of a 65,100-square-foot one-story commercial building with a rectangular plan and a flat roof. The building is constructed of rough-faced concrete masonry units with intermittent decorative sections of projecting smooth units laid in geometric patterns. The entrances are sheltered by tall soffits with the same decorative treatment that project above the cornice and support backlit business signs. The entrances, centered on the north and east facades, are fitted with fully glazed aluminum commercial doors with horizontal glass transoms.

From 1977 until the 1980s, the building was also the location of the Mercury Savings and Loan Association. It remained a Mervyn's into the 1990s. In 2009 the building was leased to Kohl's. Except for the small storefronts at its south end and altered signage to reflect the branding of the new business, it has been altered very little since its original construction. In 2015, the property ownership was transferred to the San Antonio Center, LLC.

<u>510 and 520 Showers Drive (APN 148-22-011)</u>

The 510 and 520 Showers Drive buildings are at the south end of the 350 Showers Drive Mervyn's/Kohl's building. Both appear to have been constructed as part of the original 1974 building and appear to have been extensively remodeled in about 2000 to match the decorative treatment of the Best Products building (see below) executed at about the same time. In 2015, the property ownership was transferred to the San Antonio Center, LLC. These buildings are currently vacant.

2535 California Street (APN 148-22-010)

The building at 2535 California Street was built in 1974. The 44,043-square-foot, one-story commercial building has a square plan and a flat roof with a minimal parapet and plain cornice. The building is clad in stucco siding with rough-faced concrete masonry units at lower walls and as accents. Decorative geometric metal grates are affixed to the façade.

From 1974 until 1994 the building was a showroom for the Best Products Company, Inc. After the Best Products use, the building was likely remodeled into its current form and became an Albertson's grocery store. In 2000, the building was occupied by Lucky Stores, Savon Drugs, and Bank of America. In 2007 the building was leased to 24-Hour Fitness. In 2015, the property ownership was transferred to the San Antonio Center, LLC.

435 San Antonio Road (APN 148-22-009)

This 16,213-square-foot, one-story commercial building was originally a Purity Store supermarket and is currently occupied by the Landsby Leasing Center on a short-term lease to the Greystar Development Company. Constructed in 1959, the building has a rectangular plan and an unusual roof form with a groined vault at the center surrounded by a lower-height flat roof. This design element, also referred to as a "rainbow" arch, was continuous from ground level, creating a simple building form similar to a Quonset hut. Central vaulted or arched roofs were characteristic of Purity Stores; the roofs allowed store interiors to be free of obstructing columns. This particular store was designed by noted San Francisco architect John S. Bolles and built by Bishop-Mattei Construction Company of San Francisco.

In 1971, the building became the location of a Home Yardage West fabric store after Purity Stores closed the location. From 1978 to 1997, it was used by New York Fabrics and Crafts of Pleasant Hill, Inc. The building was apparently remodeled in the early- to mid-1990s with the addition of a raised cornice above the main entrance prior to its conversion to use as a Fabri-Centers of America fabric store in 1995. Some original windows may have been infilled or painted over around the same time. In 2009, as a result of a corporate merger, the store brand changed to Jo-Ann Stores, which operated at this location until late 2020. In 2015, the property ownership was transferred to San Antonio Center, LLC. By 2022, it was the Landsby Leasing Center.

*NRHP/CRHR Evaluation of the San Antonio Shopping Center (North)*

The NRHP and CRHR require that a significance criterion from A through D or 1 through 4 (respectively) be met for a resource to be eligible for listing. (NRHP Criteria A through D are essentially identical to CRHR Criteria 1 through 4.) The eligibility criteria for the CRHR are listed under *Regulatory Framework, State Regulations*, following this section. A thorough discussion of the eligibility analysis for the San Antonio Shopping Center (north) is found in Appendix E. The criteria apply to the San Antonio Shopping Center (north) as follows.

Criterion A/1

San Antonio Shopping Center is significantly associated with the post-war commercial and residential expansion of Mountain View and the transformation of the region from an agricultural economy to Silicon Valley suburbs. When the first stores at the center opened in 1954, they were the first local retail operations outside downtown Mountain View and were surrounded by orchards and open fields. San Antonio Shopping Center initiated the development of the formerly rural San Antonio District into an important commercial and population center for the growing town. However, radical alterations to San Antonio Shopping Center, beginning in the 1990s, compromised its historic integrity--the 1954 buildings were renovated beyond recognition, Sears was demolished, San Antonio Village was developed, and the exterior fabric of the 1974 Best Products building was completely replaced. For these reasons, the shopping center as a whole does not retain integrity. Therefore, the San Antonio Shopping Center meets the significance criterion for historic eligibility but lacks the integrity required for historic listing. For these reasons, San Antonio Shopping Center (north) is recommended not eligible to the NRHP or CRHR under Criterion A/1.

Criterion B/2

The San Antonio Shopping Center (north) is not associated with the life of persons important to history. The property is recommended not eligible for the NRHP or CRHR under Criterion B/2.

Criterion C/3

The San Antonio Shopping Center (north) is not significant for its architecture. The Purity Store building (435 San Antonio Road) is an interesting work by an important architect, John S. Bolles. Bolles was at the height of his career when he designed this building, having recently completed the nearby IBM campus and having begun design for Candlestick Park, his most significant work. Although Bolles was constantly covered in the architectural press, research in trade journals of the era has not revealed any awards for the design of this building or any coverage of its construction in architecture or engineering publications. For these reasons, the building is not among the finest examples of his work and is not particularly representative of his architectural ability. Furthermore, its original Modernism has been compromised by the addition of an inappropriate parapet with cornice on the east elevation.

Research has revealed no evidence that the other buildings were designed by an architect or an important local contractor, nor do they exhibit design elements present in architectural landmarks.

For the reasons discussed above, the San Antonio Shopping Center (north) is recommended not eligible to the NRHP or CRHR under Criterion C/3.

Criterion D/4

In rare instances, buildings themselves can serve as sources of important information about historic construction materials or technologies and be significant under Criterion D/4. All the buildings at the San Antonio Shopping Center (north) are examples of well-understood types of construction and do not appear to be a principal source of important information in this regard.

Conclusion

Overall, the San Antonio Shopping Center (north) is recommended not eligible for listing on the NRHP or CRHR and, therefore, does not qualify as a historical resource under CEQA.

## REGULATORY FRAMEWORK

### Federal Regulations

No federal regulations related to cultural resources would apply to the proposed project.

The proposed project does not require any federal permits, and it is not located on federal lands; therefore, federal laws do not apply to the proposed project. The following laws are provided for context only.

The implementing regulations of the National Historic Preservation Act (NHPA) require that cultural resources be evaluated for NRHP eligibility if they cannot be avoided by an undertaking (proposed project). To determine site significance through application of NRHP criteria, several levels of potential significance that reflect different (although not necessarily mutually exclusive) values must be considered. As provided in Title 36 Code of Federal Regulations (CFR) Section 60.4, "the quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association" and must be considered within the historic context. Resources must also be at least 50 years old, except in rare cases, and, to meet eligibility criteria of the NRHP, must:

A. Be associated with events that have made a significant contribution to the broad patterns of our history; or

B. Be associated with the lives of persons significant in our past; or

C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. Have yielded, or may be likely to yield, information important in prehistory or history.

For archaeological sites evaluated under criterion (D) above, integrity requires that the site remain sufficiently intact to convey the expected information to address specific important research questions.

Cultural resources also may be considered separately under the National Environmental Policy Act per Title 42 United States Code Sections 4321 through 4327. These sections require federal agencies to consider potential environmental impacts and appropriate mitigation measures for projects with federal involvement.

## State Regulations

*California Register of Historical Resources*

The CRHR is established in Public Resources Code (PRC) Section 5024.1. PRC Section 5024.1 also presents the California properties considered to be significant historical resources, including all properties listed in, or determined to be eligible for listing, the NRHP. Resources listed in, or eligible for listing in, the CRHR are referred to as historical resources. The criteria for listing in the CRHR include resources that:

1. Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Are associated with the lives of persons important in our past;
3. Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or
4. Have yielded, or may be likely to yield, information important in prehistory or history.

California Code of Regulations (CCR) Title 14 Section 4852 also sets forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations. This CCR provision defines a historical resource as "a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources. Historical resources included in a local register of historical resources, as defined in subdivision (k) of Section 5020.1, or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1…"

Under PRC Section 21084.1: "A project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment."

*CEQA Section 21083.2 (Archaeological Resources)*

In addition to requiring the protection of historical resources, CEQA (Section 21083.2; PRC Section 21000 et seq.) requires that the lead agency determine whether a project may have a significant effect on unique archaeological resources. A unique archaeological resource is defined in CEQA as an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it:

- Contains information needed to answer important scientific research questions, and there is demonstrable public interest in that information;
- Has a special or particular quality, such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

*California Health and Safety Code Section 7050.5*

Section 7050.5 of the Health and Safety Code requires that construction or excavation be stopped in the vicinity of discovered human remains until the county coroner can determine whether the remains are those of a Native American. If the remains are determined to be a Native American, the coroner must then contact the Native American Heritage Commission (NAHC). Under PRC Section 5097.98, the NAHC will determine the most likely descendants of the remains and notify them of the discovery. Also, under PRC Section 5097.98 (a-b), the landowner (and presumably the project proponent) will confer with the most likely descendant to determine appropriate treatment of the human remains.

Measures to conserve, preserve, or mitigate and avoid significant effects on these resources are also provided under CEQA Section 21083.2. CEQA Guidelines Section 15064.5 also provides criteria and processes/procedures for identifying and minimizing harm to historical resources.

### Local Regulations and Policies

Cultural resources and historic preservation are addressed in Chapter 3, Land Use and Design, of the City of Mountain View 2030 General Plan (City of Mountain View, 2012), The 2030 General Plan was adopted in July 2012 and has been amended numerous times through August 2021. The General Plan contains one goal that addresses cultural resources:

Goal LUD-11: Preserved and protected important historic and cultural resources.

The General Plan contains six policies that were adopted for the purpose of avoiding or mitigating an environmental impact as related to cultural resources. The five policies that would directly apply to the project are the following:

Policy LUD 11.1: *Historical preservation.* Support the preservation and restoration of structures and cultural resources listed in the Mountain View Register of Historic Resources, the California Register of Historic Places or National Register of Historic Places.

Policy LUD 11.2: *Adaptive re-use.* Encourage the adaptive re-use of historic buildings in ways that retain their historical materials and character-defining features.

Policy LUD 11.3: *Incentives.* Encourage historical preservation through incentives and opportunities.

Policy LUD 11.5: *Archaeological and paleontological site protection.* Require all new development to meet state codes regarding the identification and protection of archaeological and paleontological deposits.

Policy LUD 11.6: *Human remains.* Require all new development to meet state codes regarding the identification and protection of human remains

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Significance Criteria

For purposes of this Draft EIR and based on Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on cultural resources if it would:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5;

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5; or

c) Disturb any human remains, including those interred outside of formal cemeteries.

A discussion of these criteria is included in the impact analysis below. If an impact on a historical or archaeological resource is significant, CEQA requires feasible measures to minimize the impact (14 CCR Section 15126.4 (a)(1)). Mitigation of significant impacts under the criteria listed above must lessen or eliminate the physical impact that the project would have on the resource.

### Less-than-Significant Impacts

*The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5.*

Significance Criterion (a), listed above, pertains to resources of the built environment, including buildings, structures, districts, and landscapes. The proposed project would demolish the existing buildings that comprise the northern portion of the San Antonio Shopping Center. The buildings within the project site (350 Showers Drive, 510 and 520 Showers Drive, 2535 California Street, 435 San Antonio Road), are all more than 45 years of age, requiring an evaluation of their significance and potential for listing on the CRHR.

The evaluation of the historic-era buildings that comprise the San Antonio Shopping Center (north) (see the DPR form in Appendix E for a detailed analysis) determined that none of the buildings individually met the criteria for significance pursuant to PRC Section 5024.1, nor did the shopping center itself appear to be an eligible resource under CEQA. Therefore, no historical resources of the built environment are located within the project footprint, the project would not cause a substantial adverse change to historical resources of the built environment, and no impact would occur.

### Potentially Significant Impacts

**<u>Impact CULT-1</u>: The project could cause a substantial adverse change in the significance of an archaeological resource pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15064.5. (PS)**

The entire project site would be cleared of its existing buildings, along with the extant parking facilities and landscape features. Such demolition would cause ground disturbance over the entire area. New project construction-related disturbances would involve extensive grading of the entire site, installation and rerouting of on-site utilities, excavations for building foundations and landscaping features, and excavation for the installation of lighting fixtures. The maximum anticipated depth of ground disturbance for the demolition of the current buildings and construction of the new school and its facilities would be 6 feet.

No archaeological resources that are considered unique archaeological resources or are eligible for listing on the CRHR are currently known to exist within the project site, nor does the geology of the area appear sensitive for deeply buried archaeological materials. However, even though the entire project footprint has previously been disturbed by construction of the shopping center, significant archaeological resources may be located below the extant development and accidentally uncovered during construction. Such resources may also be determined to be tribal cultural resources, as discussed in *Section 4.15, Tribal Cultural Resources*. Native American materials most likely would include obsidian and chert flaked stone tools (e.g., projectile points, knives, and choppers), tool-making debris, or milling equipment such as mortars and pestles. The project site may also contain buried historic-era archaeological remains, as historic maps and aerial photographs indicate that farm buildings once existed at locations around the periphery of the site. As a result, if present, historic-era archaeological remains are likely to consist of building foundations or agricultural-related items such as pieces of wire, or perhaps equipment parts, and possibly items left by farm workers such as tin cans and fragments of glass bottles.

If archaeological remains are accidentally discovered during ground disturbing-activities, CEQA requires that the resources be evaluated for significance and eligibility for listing in the CRHR. If it is determined that the proposed project activities would affect the eligible archaeological resources in a way that would render them ineligible for such listing, a significant impact would result. Implementation of Mitigation Measure CULT-1 would ensure that impacts on currently unknown CRHR-eligible resources are reduced to a less-than-significant level. Pre-construction cultural resources awareness instruction would alert construction personnel about the potential for buried archaeological resources and provide guidelines for stopping work, should any such resources be encountered. Other elements of Mitigation Measure CULT-1 include evaluating the finds for CRHR eligibility, and implementing appropriate mitigation measures, as necessary. Implementation of Mitigation Measure CULT-1 would reduce impacts related to discovered archaeological resources and archaeological resources that are also tribal cultural resources to a level that would be less than significant with mitigation.

*Mitigation Measure CULT-1: The following measures shall be implemented:*

a) *During the first construction tailgate safety meeting, the project construction site superintendent shall remind all project personnel that they are legally required to stop work and notify their supervisor if they believe that they have unearthed archaeological artifacts. The construction superintendent shall similarly instruct all new construction personnel who arrive on the project site after the initial tailgate safety meeting.*

b) *If evidence of any subsurface archaeological features or deposits is discovered during construction-related earth-moving activities (e.g., lithic scatters, midden soils, historic era farming or construction materials), all ground-disturbing activity in the area of the discovery shall be halted within 25 feet of the find until a qualified archaeologist and Native American representative from a traditionally and culturally affiliated tribe, as appropriate, can assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment may be,* *but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, and/or returning objects to a location within the project area where they will not be subject to future impacts.*

c) *If, after evaluation, a resource is considered significant, or is considered a tribal cultural resource, all preservation options shall be considered as required by the California Environmental Quality Act (CEQA) (see Public Resources Code Section 21084.3), including possible capping, data recovery, mapping, or avoidance of the resource. Treatment that preserves or restores the cultural character and integrity of a tribal cultural resource may include tribal monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. If artifacts are recovered from significant prehistoric archaeological resources or tribal cultural resources, the first option shall be to transfer the artifacts to an appropriate tribal representative. If possible, accommodations shall be made to re-inter the artifacts at the project site. Only if no other options are available will recovered Native American archaeological material be housed at a qualified curation facility. The results of the identification, evaluation, and/or data recovery program for any unanticipated discoveries shall be presented in a professional-quality report that details all methods and findings, evaluates the nature and significance of the resources, analyzes and interprets the results, and distributes this information to the public.*

*The combination of the above measures would reduce this impact to less than significant. (LTS)*

**Impact CULT-2: The project could disturb human remains, including those interred outside of formal cemeteries. (PS)**

Human remains are not known to be present at the project site but, like archaeological resources, they may be present below the ground surface. Although the entire project site has been completely developed, there is the possibility that project construction may have a significant impact on human remains, although this is considered unlikely. Should any such remains be discovered during construction, California Health and Safety Code Section 7050.5 requires that work immediately stop within the vicinity of the finds and that the county coroner be notified to assess the finds. Implementation of Mitigation Measure CULT-2 would ensure that the proposed project would not result in any substantial adverse effects on human remains uncovered during the course of construction by requiring that, if human remains are uncovered, work must be halted and the county coroner must be contacted. Adherence to these procedures and provisions of the California Health and Safety Code would reduce potential impacts on human remains to less than significant with mitigation.

*Mitigation Measure CULT-2: Construction work shall immediately be halted if human remains are discovered, and applicable Provisions of the California Health and Safety Code Section 7050.5 shall be implemented. If human remains are accidentally discovered during project construction activities, the requirements of California Health and Safety Code Section 7050.5 shall be followed. Potentially damaging excavation shall halt on the project site within a minimum radius of 100 feet of the remains, and the county coroner shall be notified. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (California Health and Safety Code Section*

*7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (California Health and Safety Code Section 7050[c]). Pursuant to the provisions of Public Resources Code Section 5097.98, the NAHC shall identify a Most Likely Descendent (MLD). The MLD designated by NAHC shall have at least 48 hours to inspect the site and propose treatment and disposition of the remains and any associated grave goods. The Los Altos School District (LASD) shall work with the MLD to ensure that the remains are removed to a protected location and treated with dignity and respect. Native American human remains may also be determined to be tribal cultural resources. The county coroner shall contend with the human remains if they are not of Native American origin. Adherence to these procedures and provisions of the California Health and Safety Code would reduce potential impacts on human remains less than significant. (LTS)*

### Cumulative Impacts

As discussed above, the project would not affect any historical resources of the built environment. Thus, the project would not contribute to any potential cumulative impact on historical built environment resources.

There is the potential that the proposed project could encounter previously unrecorded archaeological resources and human remains, as discussed under Impacts CULT-1 and CULT-2. The implementation of Mitigation Measures CULT-1 and CULT-2 would, however, reduce any potential impacts on these resources to less-than-significant levels. Therefore, the project's contribution to cumulative impacts on archaeological resources and human remains would not be cumulatively considerable, and no additional mitigation measures would be required.

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# 4.5 ENERGY

## INTRODUCTION

This section describes the existing setting, regulatory framework, and the project's potential impacts related to energy.

## ENVIRONMENTAL SETTING

### Electricity and Natural Gas

Silicon Valley Clean Energy (SVCE) is the primary electricity provider for residences and businesses in Mountain View. SVCE is known as a Community Choice Aggregator and offers up to 100 percent carbon-free electricity to residential and commercial customers. The electricity generated by SVCE is delivered to customers by the Pacific Gas and Electric Company (PG&E) over the poles and wires they continue to own and maintain. PG&E also provides natural gas services.

### Transportation Fuels

According to the California Energy Commission (CEC), transportation accounts for a major portion of California's overall energy consumption. Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles (CEC, 2023a). Diesel fuel is the second largest transportation fuel used in California, representing about 17 percent of total fuel sales behind gasoline. Nearly all heavy duty-trucks, delivery vehicles, buses, trains, ships, boats, barges, farm, construction, and heavy-duty military vehicles and equipment have diesel engines (CEC, 2023b).

## REGULATORY FRAMEWORK

### Federal Regulations

*National Energy Conservation Policy Act*

The National Energy Conservation Policy Act (NECPA) is the foundation for federal-level conservation and efficiency goals and requirements for energy and water, and the use of renewable energy sources. The NECPA was a result of the energy crisis during the mid-1970s and was signed into law in 1978. As passed, the NECPA promoted three major roles for the federal government in energy conservation: setting energy-efficiency standards, disseminating information about energy conservation opportunities, and improving efficiencies of federal buildings.

*Energy Policy Act of 2005*

The Energy Policy Act addresses energy production in the United States in the following aspects: energy efficiency, renewable energy, oil and gas, coal, tribal energy, nuclear matters and security, vehicles and motor fuels, hydrogen, electricity, energy tax incentives, hydropower and geothermal, and climate change technology. The Energy Policy Act of 2005 granted the Federal Energy Regulatory Commission the responsibilities and the authority to oversee the nation's electricity transmission grid, ensure fair competition in the wholesale power markets, and provide rate incentives to promote electric transmission investment, among other duties.

## State Regulations

*California Energy Efficiency Regulations*

California has established statewide energy efficiency regulations, including programs that increase the statewide procurement of renewable energy. The key state regulations related to energy use are as follows:

- The Renewable Portfolio Standard Program, as updated in 2018 (Senate Bill 100), requires the state to procure 60 percent of its electricity from renewable sources by 2030 and 100 percent from carbon-free sources by 2045.
- Title 24 Building Efficiency Standards are updated every three years with the long-term vision to support zero-net energy for all new high-rise residential and nonresidential buildings by 2030.
- Title 24 California Green Building Standards, referred to as the CALGreen Code, aim to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) environmental air quality.

*Warren-Alquist Act*

The Warren-Alquist Act of 1975 is the legislation that created the CEC. The Act enables the CEC to formulate and adopt the nation's first-ever energy conservation standards for buildings constructed and appliances sold in California. The CEC was also directed to create a research and development program with a focus on fostering non-conventional energy sources.

*California Energy Action Plan*

California's 2008 Energy Action Plan Update updates the 2005 Energy Action Plan II, which is the state's principal energy planning and policy document. The plan maintains the goals of the original Energy Action Plan, describes a coordinated implementation plan for state energy policies, and identifies specific action areas to ensure that California's energy is adequate, affordable, technologically advanced, and environmentally sound. First-priority actions to address California's increasing energy demands are the promotion of energy efficiency, demand response (i.e., reducing customer energy usage during peak periods to address power system reliability and support the best use of energy infrastructure), and use of renewable power sources. To the extent that these strategies are unable to satisfy increasing energy and capacity needs, the plan supports clean and efficient fossil-fuel fired generation.

### Local Regulations and Policies

*Mountain View General Plan*

The City of Mountain View 2030 General Plan (City of Mountain View, 2012) includes the following policies related to energy:

Policy LUD 10.5: *Building energy efficiency.* Incorporate energy-efficient design features and materials into new and remodeled buildings.

Policy LUD 10.6: *On-site energy technologies.* Support on-site renewable energy technologies that help reduce community energy demand.

Policy LUD 10.9: *Sustainable roofs.* Encourage sustainable roofs to reduce a building's energy use, reduce the heat island effect of new and existing development and provide other ecological benefits.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Significance Criteria

Per the CEQA Guidelines, implementation of the project would result in a significant impact related energy if it would:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

### Less-than-Significant Impacts

*Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources*

*The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.*

The proposed project would involve construction and operation of a new school that would consume energy during the construction and operational phases. The construction phase would require energy for various purposes such as demolishing the existing commercial buildings, preparing the project site, transporting building materials and soils, and constructing buildings and infrastructure. The operational phase would require energy for various purposes such as heating, cooling, lighting, appliances, and vehicle trips. According to Appendix F of the California Environmental Quality Act (CEQA) Guidelines, the discussion of the overall energy impacts of a project in an Environmental Impact Report (EIR) should prioritize the prevention or minimization of energy consumption that is inefficient, wasteful, or unnecessary.

Project construction would take about 18 to 24 months to complete. Since construction activities would be temporary, they would not result in a long-term increase in energy consumption. The construction contractor would have no financial incentive to waste fuel used by the construction equipment (i.e., excess fuel usage reduces profits). Therefore, it is generally assumed that fuel used during construction would be conserved to the maximum extent feasible. Furthermore, regulations enforced by the California Air Resources Board (Title 13, Section 2485 of California Code of Regulations) limit the idling time of diesel construction equipment to five minutes. It is anticipated that energy consumption during the construction period would be minimized to the maximum extent practical. Therefore, energy consumption during project construction would not be inefficient, wasteful, or unnecessary.

The project would comply with the current Title 24 Building Energy Efficiency Standards. In addition, LASD has adopted a 2030 Zero Net Energy (ZNE) goal (Gelfand, 2022) that would be achieved by applying measures such as installing solar panels, eliminating natural gas use, installing EV infrastructure, and purchasing green power. By achieving ZNE by 2030 and applying energy efficiency and reduction measures, energy consumption during project operation would not be inefficient, wasteful, or unnecessary.

Based on the analysis above, project construction and operation would have a less-than-significant impact related to the inefficient, wasteful, or unnecessary consumption of energy resources.

*Conflict with Plans for Renewable Energy or Energy Efficiency*

*The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.*

As described above, the project is designed to achieve the 2030 ZNE goal. For example, the project design includes the installation of solar panels to generate electricity on-site as a renewable energy resource. Therefore, the project would have a less-than-significant impact related to conflicts with plans for renewable energy or energy efficiency.

### Potentially Significant Impacts

No potentially significant impacts related to energy resources would result from the project.

### Cumulative Impacts

Energy impacts are, by their nature, cumulative impacts because one project by itself cannot significantly contribute to or cause significant environmental effects. As discussed above, the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with state or local plans for renewable energy or energy efficiency. Therefore, the project would not result in any cumulatively considerable impacts related to energy.

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# 4.6 GEOLOGY AND SOILS

## INTRODUCTION

This section evaluates the proect's potential geology and soils impacts. The setting section describes the geologic environment of the project site based on maps and documents from the United States Geological Survey (USGS), the California Geological Survey (CGS), and other sources. The regulatory framework applicable to geologic and seismic hazards is summarized. The potential impacts related to these hazards are analyzed, including impacts from strong ground shaking, liquefaction, lateral spreading, differential settlement, and unstable or expansive soils. Appropriate mitigation measures are identified, as necessary.

## ENVIRONMENTAL SETTING

### Geologic Conditions

*Geology*

The project site is located within the Coast Ranges geomorphic province,[1] a relatively geologically young and seismically active region (CGS, 2002a; Norris and Webb, 1976). The Coast Ranges are mountain ranges (approximately 2,000 to 4,000 and occasionally 6,000 feet elevation above sea level) and valleys that trend northwest, approximately parallel to the San Andreas Fault, from near the Oregon border to southern California. The only major break in the Coast Ranges is the depression containing San Francisco Bay; the project site is located within this region.

The project site is located within the Santa Clara Valley, which is a broad alluvial plain between the Santa Cruz Mountains to the southwest and west, and the Diablo Range to the northeast. The San Andreas Fault system exists within the Santa Cruz Mountains and the Hayward Fault and Calaveras Fault systems exist within the Diablo Range.

The Santa Clara Valley is a trough-like depression filled with Quaternary alluvium deposits of unconsolidated gravel, sand, silt, and clay that eroded from adjacent mountain ranges by flowing water and were deposited into the valley. The alluvium comprises interfingering alluvial fans, stream deposits and terrace deposits. The valley fill alluvium can be divided into two major Quaternary deposits: Holocene deposits (younger than 10,000 years old) and Pleistocene deposits (from 1.8 million to 10,000 years old). The Holocene deposits consist of the most recent sediments deposited along major stream courses and bay mud deposits along the San Francisco Bay. The Holocene alluvial sediment consists mainly of clay, silt, and sand occurring in discontinuous lenses. The majority of the Santa Clara Valley alluvium is older, Pleistocene deposits of unconsolidated and interfingered lenses of clay, silt, sand, and gravel (Santa Clara Valley Water District, 2021). The project site is underlain by Holocene alluvium (Graymar, et al., 2006).

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[1] A geomorphic province is a naturally defined geologic region that displays a distinct combination of features based on geology, faults, topography, and climate. Eleven geomorphic provinces are recognized in California.

*Topography*

The project site is relatively flat, ranging in elevation from approximately 51 to 62 feet referenced to the North Atlantic Vertical Datum of 1988, and gently sloping down toward the north (BGT Land Surveying, 2023).

*Groundwater*

The project site is located within the Santa Clara Valley Groundwater Basin, Santa Clara Subbasin. Groundwater within the Santa Clara Subbasin is generally found within aquifers consisting of high permeability sand and gravel layers interbedded between low-permeability clay and silt layers. The low-permeability layers confine the aquifers and limit the migration of groundwater between aquifers. Recharge within the Santa Clara Subbasin generally occurs along the margins and southern portion of the subbasin where coarse-grained sediments predominate. The recharge area includes the alluvial fan and fluvial deposits along the edge of the subbasin where high lateral and vertical permeability allow surface water to infiltrate the aquifers. The percolation of surface water in recharge areas replenishes unconfined groundwater within the recharge area and contributes to the recharge of principal aquifers in the confined area through subsurface flow. The project site is located within the confined area in the northwest portion of the Santa Clara Subbasin (Santa Clara Valley Water District, 2021). Groundwater has been encountered beneath the project site at depths of approximately 15 to 20 feet (Terraphase Engineering, 2022).

## Seismic Conditions

The entire Bay Area is located within the San Andreas Fault Zone, a complex of active faults. Numerous historic earthquakes have been generated in northern California on faults within the San Andreas Fault Zone. This level of active seismicity results in relatively high seismic risk in the Bay Area.

The project site is vulnerable to seismic activity based on the presence of several active faults in the region. An active fault is one that has experienced displacement within the last 11,700 years (CGS, 2018) and is expected to move again at some point in the future. The major active faults in the region that are closest to the project site are the Hayward, Calaveras, Monte Vista, and San Andreas faults. The Hayward, Calaveras, and San Andreas faults have had recent fault displacement (historically recorded within the last 200 years), and the Monte Vista Fault has no historic record of fault displacement (CGS, 2023a).

The Working Group on California Earthquake Probabilities and the USGS have predicted a 22 percent probability of a Moment Magnitude ($M_w$)[2] 6.7 or greater earthquake on the Northern San Andreas Fault between 2014 and 2043, a 33 percent chance on the Hayward Fault, and a total probability of 72 percent that an earthquake of $M_w$ 6.7 or greater will occur on one of the regional Bay Area faults during that time (USGS, 2016).

[2] $M_W$, as opposed to Richter Magnitude, is now commonly used to characterize seismic events. $M_W$ is determined from the physical size (area) of the rupture of the fault plane, the amount of horizontal and/or vertical displacement along the fault plane, and the resistance to rupture of the rock type along the fault.

## Soils, Geologic, and Seismic Hazards

Seismic hazards are generally classified in two categories: primary seismic hazards (surface fault rupture and ground shaking) and secondary seismic hazards (liquefaction and other types of seismically induced ground failure). These hazards are discussed below and provide the initial context for further evaluation in the impact analysis.

*Surface Rupture*

Surface rupture occurs when the ground surface is broken due to fault movement during an earthquake. Surface rupture generally can be assumed to occur along an active or potentially active major fault trace. Areas susceptible to fault rupture are delineated by the CGS Alquist-Priolo Earthquake Fault Zones. The Alquist-Priolo Earthquake Fault Zoning Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Alquist-Priolo Earthquake Fault Zoning Act requires specific geological investigations prior to certain kinds of development to reduce the threat to public health and safety and to minimize the loss of life and property posed by earthquake-induced ground failure. The project site is not located within an Alquist-Priolo Earthquake Fault Zone (CGS, 2023b) or Santa Clara County Fault Rupture Hazard Zone (Santa Clara County, 2012) and no known active faults exist on the project site (CGS, 2023a).

*Ground Shaking*

Ground shaking is a general term referring to all aspects of motion of the earth's surface resulting from an earthquake, and is normally the major cause of damage in seismic events. The extent of ground shaking is controlled by the magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions. The Modified Mercalli Intensity Scale (MMI) is the most commonly used scale for measurement of the subjective effects of earthquake intensity (see **Table 4.6-1**). The MMI values range from I (earthquake not felt) to XII (damage nearly total), and intensities ranging from VII to XII can cause moderate to significant structural damage.

Mapping of earthquake shaking scenarios by the Association of Bay Area Governments (ABAG) indicates that a large earthquake on the San Andreas Fault would produce the maximum ground shaking intensities at the project site with severe shaking (MMI VIII). A large earthquake on the Hayward Fault would produce very strong shaking (MMI VII) and a large earthquake on the Calaveras, Mount Diablo Thrust, or Greenville faults would produce strong shaking (MMI VI) at the project site (ABAG, 2023).

*Liquefaction, Lateral Spreading, and Seismic Settlement*

Liquefaction is the temporary transformation of loose, saturated granular sediments from a solid state to a liquefied state as a result of seismic ground shaking. In the process, the soil undergoes transient loss of strength, which commonly causes ground displacement or ground failure to occur. Because saturated soils are a necessary condition for liquefaction, soil layers in areas where the groundwater table is near the surface have higher liquefaction potential than those in which the water table is located at greater depths. The potential for liquefaction-induced ground failure (e.g., loss of bearing strength, ground fissures, sand boils) depends on the thickness of the liquefiable soil layer relative to the thickness of the overlying non-liquefiable material.

**TABLE 4.6-1 MODIFIED MERCALLI INTENSITY SCALE**

| Intensity | Effects |
|---|---|
| I. | Not felt except by a very few under especially favorable circumstances. |
| II. | Felt only by a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing. |
| III. | Felt quite noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibration like passing of truck. Duration estimated. |
| IV. | During the day felt indoors by many, outdoors by few. At night some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably. |
| V. | Felt by nearly everyone, many awakened. Some dishes, windows, etc., broken; a few instances of cracked plaster; unstable objects overturned. Disturbances of trees, poles, and other tall objects sometimes noticed. Pendulum clocks may stop. |
| VI. | Felt by all, many frightened and run outdoors. Some heavy furniture moved; a few instances of fallen plaster or damaged chimneys. Damage slight. |
| VII. | Everybody runs outdoors. Damage negligible in building of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars. |
| VIII. | Damage slight in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving motor cars disturbed. |
| IX. | Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken. |
| X. | Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from river banks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks. |
| XI. | Few, if any, (masonry) structures remain standing. Bridges destroyed. Board fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly. |
| XII. | Damage total. Practically all works of construction are damaged greatly or destroyed. Waves seen on ground surface. Lines of sight and level are distorted. |

Source: CGS, 2002b.

Lateral spreading is a form of horizontal displacement of soil toward an open channel or other "free" face, such as an excavation boundary. In a lateral spread failure, a layer of ground at the surface is carried on an underlying layer of liquefied material over a nearly flat surface toward a free face. The lateral spreading hazard tends to mirror the liquefaction hazard for a site (assuming a free face is located nearby).

Seismic hazard mapping by CGS indicates that the project site is not located within a Liquefaction Hazard Zone (CGS, 2023b); therefore, the project site would not be expected to be susceptible to significant liquefaction or lateral spreading hazards.

Seismic settlement (also referred to as cyclic densification or differential compaction) can occur when non-saturated, cohesionless sand or gravel soil is densified by earthquake vibrations. When the degree of cyclic densification varies based on variations in soil types, differential settlement may occur, which can result in greater damage to improvements compared to relatively equal settlement.

*Landslides/Slope Instability*

Slope failure can occur as either rapid movement of large masses of soil (landslide) or slow, continuous movement (creep) on slopes of varying steepness. Areas susceptible to landslides are characterized by steep slopes and downslope creep of surface materials. The project site is relatively flat, with no significant slopes on or near the project site. The project site is not located within a CGS designated Landslide Hazard Zone (CGS, 2023b) or a Santa Clara County Landslide Hazard Zone (Santa Clara County, 2012), and therefore would not be susceptible to landslides/slope instability.

*Settlement, Differential Settlement, and Subsidence*

Settlement is the lowering of the land surface elevation typically as a result of loading (i.e., placing heavy loads such as fill material or structures), which often occurs with the development of a site. Settlement or differential (i.e., unequal) settlement could occur when improvements are built on low-strength foundation materials (loose artificial fill materials) or if improvements straddle the boundary between different types of subsurface materials (e.g., a boundary between native material and/or new engineered fill). Settlement from new loads generally occurs slowly enough that its effects are not dangerous; however, it can cause significant damage to improvements such as buildings and utilities over time.

Subsidence is the lowering of the land-surface elevation. The mechanism for subsidence is generally related to groundwater pumping and subsequent consolidation of loose aquifer sediments. Subsidence may also be related to settlement as discussed above. Hazards associated with subsidence include increased risks of flooding and damage to underground utilities as well as above-ground structures. Other potential effects of subsidence include changes in the gradients of stormwater and sanitary sewer drainage systems for which the flow is gravity driven.

Historical groundwater pumping in the Santa Clara Valley resulted in a decline of groundwater levels by as much as 200 feet. Fluid pressure in the aquifers was reduced, resulting in the compression of fine-grained materials (e.g., clays) and a broad sagging of the land surface. Approximately 2 feet of inelastic (permanent) subsidence was observed in the area of the project site between 1934 and 1967. Significant inelastic subsidence in the Santa Clara Valley was essentially halted by around 1970 through the Santa Clara Valley Water District's expanded conjunctive management programs, which allowed groundwater levels to recover substantially. Some amount of elastic (temporary) subsidence occurs annually in response to seasonal pumping in the subbasin (Santa Clara Valley Water District, 2021).

*Expansive Soils*

Expansion and contraction of soil volume can occur when expansive soils undergo alternating cycles of wet conditions (causing swelling) and dry conditions (causing shrinking). During these cycles, the volume of the soil changes markedly. Shrink-swell potential is influenced by the amount and type of clay minerals present and can be measured by the percent change of the soil volume. Shrink-swell potential is also influenced by the location of the soils; soils below the groundwater table maintain a steady moisture content and would therefore not be subject to shrink-swell effects. As a consequence of volume changes due to expansive soils, structural damage to buildings and infrastructure can occur if potentially expansive soils are not considered in project design and during construction.

### Paleontological Conditions

Paleontological resources include fossilized remains or traces of organisms, including plants, vertebrates (animals with backbones), invertebrates (e.g., starfish, clams, ammonites, and marine coral), and microscopic plants and animals (microfossils), including their imprints, from a previous geological period. Collecting localities and the geologic formations containing those localities are also considered paleontological resources as they represent a limited, non-renewable resource and once destroyed, cannot be replaced. The Society of Vertebrate Paleontology (SVP) has established guidelines for the identification, assessment, and mitigation of adverse impacts on non-renewable paleontological resources. The SVP has helped define the value of paleontological resources and, in particular, states that significant paleontological resources are fossils and fossiliferous deposits consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 years) (SVP, 2010).

Late Pleistocene vertebrate fossils have been found from multiple localities in the Santa Clara Valley in areas mapped as surficial Holocene deposits, including in San Jose, Sunnyvale, Mountain View, and Palo Alto. This suggests that Pleistocene deposits are present at relatively shallow depths in Santa Clara Valley. A partial pelvis of a mammoth was found as shallow as 9 feet below the ground surface in Sunnyvale (Maguire, K.C. and Holroyd, P.A., 2016). Based on the previous discovery of late Pleistocene vertebrate fossils in various locations throughout the Santa Clara Valley, paleontological resources could be present at the project site.

## REGULATORY FRAMEWORK

### Federal Regulations

*National Earthquake Hazards Reduction Program*

The National Earthquake Hazards Reduction Program (NEHRP) was established by the U.S. Congress when it passed the Earthquake Hazards Reduction Act of 1977, Public Law (PL) 95–124. In establishing NEHRP, Congress recognized that earthquake-related losses could be reduced through improved design and construction methods and practices, land use controls and redevelopment, prediction techniques and early-warning systems, coordinated emergency preparedness plans, and public education and involvement programs. The four basic NEHRP goals are:

- Develop effective practices and policies for earthquake loss reduction and accelerate their implementation.
- Improve techniques for reducing earthquake vulnerabilities of facilities and systems.
- Improve earthquake hazards identification and risk assessment methods, and their use.
- Improve the understanding of earthquakes and their effects.

Several key federal agencies contribute to earthquake mitigation efforts, with four primary NEHRP agencies:

- National Institute of Standards and Technology (NIST) of the Department of Commerce
- National Science Foundation (NSF)
- United States Geological Survey (USGS) of the Department of the Interior
- Federal Emergency Management Agency (FEMA) of the Department of Homeland Security

Implementation of NEHRP priorities is accomplished primarily through original research, publications, and recommendations to assist and guide state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

## State Regulations

*Alquist-Priolo Earthquake Fault Zoning Act*

The Alquist-Priolo Earthquake Fault Zoning Act was passed into law in 1972 and requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of known active faults and to issue appropriate maps. “Earthquake Fault Zones” were called “Special Studies Zones” prior to January 1, 1994. The Alquist-Priolo maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. Local agencies must regulate most development projects within the zones. The Alquist-Priolo Earthquake Fault Zoning Act ensures public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep.

*Seismic Hazards Mapping Act*

The Seismic Hazards Mapping Act of 1990 (Public Resources Code [PRC] Sections 2690- 2699.6) directs CGS to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. The purpose of the Seismic Hazards Mapping Act is to minimize loss of life and property through the identification, evaluation, and mitigation of seismic hazards. As a result, CGS geologists gather existing geological, geophysical, and geotechnical data from numerous sources to produce the Seismic Hazard Zone Maps. They integrate and interpret these data regionally in order to evaluate the severity of the seismic hazards and designate those areas prone to ground shaking, liquefaction, and earthquake-induced landslides as Zones of Required Investigation. Cities and counties are then required to use the Seismic Hazard Zone Maps in their land use planning and building permit processes. The Seismic Hazards Mapping Act requires that site-specific geotechnical investigations be conducted within Zones of Required Investigation to identify and evaluate seismic hazards and formulate mitigation measures prior to permitting most developments designed for human occupancy. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, ground shaking, and landslides (primarily the San Francisco Bay Area and the Los Angeles basin).

*California Building Code*

The 2022 California Building Code, which refers to Part 2 of the California Building Standards Code in Title 24 of the California Code of Regulations, is based on the 2021 International Building Code and is the most current state building code. The 2022 California Building Code covers grading and other geotechnical issues, building specifications, and non-building structures. The California Building Code is renewed on a triennial basis (every three years).

The California Building Code requires that a site-specific geotechnical investigation report be prepared by a licensed professional for proposed developments of one or more buildings greater than 4,000 square feet to evaluate geologic and seismic hazards. Buildings less than or equal to 4,000 square feet also require a geologic engineering report, except for one-story, wood-frame, and light-steel-frame buildings that are located outside of the Alquist-Priolo Earthquake Fault Zones. The purpose of the geotechnical investigation is to identify seismic and geologic conditions that require project mitigation, such as ground shaking, liquefaction, differential settlement, expansive soils, and slope stability. Based on the conditions of the site, the building code requires specific design parameters to ensure construction of buildings that will resist collapse during an earthquake. These design parameters do not protect buildings from all earthquake shaking hazards but are designed to reduce hazards to a manageable level. Requirements for the geotechnical investigation are presented in Chapter 16 "Structural Design" and Chapter 18 "Soils and Foundation" of the 2022 California Building Code.

*Division of the State Architect*

The Division of the State Architect (DSA) provides design and construction oversight for Kindergarten through 12th grade (K-12) schools, community colleges, and various other state-owned and state-leased facilities to ensure that they comply with all structural, accessibility, and fire and life safety codes. DSA's enforcement responsibilities for public elementary and secondary schools (grades K-12) are contained in Education Code Sections 17280-17317 and 17365-17374. Construction plans must be reviewed and approved by DSA before a contract for construction can be awarded (California Department of General Services, 2023). A geohazard report is required for new school sites and must be submitted to CGS for review and acceptance, and, subsequently, to DSA (DSA, 2021).

*Field Act*

The Field Act, contained in Education Code Sections 17280-17317 (for grades K-12), adds additional seismic safety requirements for California schools. The Field Act includes requirements for seismic design standards, plan review, construction inspections, and testing, which are overseen by DSA through plan review, permitting, and inspection of schools under construction. The Field Act establishes stringent structural safety standards for public schools to withstand earthquakes and other hazards, not only to protect students and staff, but also because schools may serve as emergency shelters for their communities in the event of a disaster (California Department of General Services, 2023).

# ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

## Significance Criteria

In accordance with the California Environmental Quality Act (CEQA) Guidelines, implementation of the proposed project would result in a significant impact related to geology and soils if it would:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: (1) 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; (2) strong seismic ground shaking; (3) seismic-related ground failure, including liquefaction; and (4) landslides;

b) Result in substantial soil erosion or the loss of topsoil;

c) 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 an on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater; or

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

The following significance criterion would not apply to the proposed project and is therefore excluded from further discussion in this impact analysis:

- *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater.* The project would not involve the use of septic tanks or other alternative wastewater disposal systems. Therefore, there would be no impacts related to use of septic tanks or alternative wastewater disposal systems.

## Less-than-Significant Impacts

*Surface Rupture*

*The project would not directly or indirectly cause potential substantial adverse effects involving rupture of a known earthquake fault.*

As discussed under *Environmental Setting* above, the project site does not contain any known active faults or faults mapped as subject to surface rupture under the Alquist-Priolo Earthquake Fault Zoning Act. Therefore, the potential for fault rupture to occur at the project site is highly unlikely and this impact would be less than significant.

*Ground Shaking*

*The project would not directly or indirectly cause potential substantial adverse effects involving strong seismic ground shaking.*

The risk of ground shaking impacts for the project would be reduced through adherence to plans and specifications approved by DSA that meet the design and materials standards set forth in the California Building Code and the Field Act. The project design and construction must also follow recommendations from a site-specific geohazard report that must be prepared for the project and approved by CGS and DSA. The project's required adherence to these existing regulations would ensure that the risks to people and structures due to strong seismic ground shaking would represent a less-than-significant impact.

*Liquefaction/Lateral Spreading*

*The project would not directly or indirectly cause potential substantial adverse effects involving seismic-related ground failure, including liquefaction, and would not result in lateral spreading.*

As discussed under *Environmental Setting* above, mapping by CGS indicates that the project site is not located within a Liquefaction Hazard Zone, and there are no free faces located on or near the project site; therefore, the project site would not be expected to be susceptible to significant liquefaction or lateral spreading hazards. Recommendations from the site-specific geohazard report would include recommendations that would address the potential for impacts related to liquefaction or lateral spreading hazards, if present. Therefore, the project would have less-than-significant impacts related to liquefaction and lateral spreading.

*Landslides*

*The project would not result in on-site or off-site landslides.*

As discussed under *Environmental Setting* above, the project site is relatively flat with no significant slopes on or near the project site; therefore, the project would have no impacts related to landslides.

*Soil Erosion and Loss of Topsoil*

*The project would not result in substantial soil erosion or loss of topsoil.*

Soil erosion, which is discussed in detail in *Section 4.9, Hydrology and Water Quality*, could occur during project grading and construction. As described in Section 4.9, required compliance with the State Water Resources Control Board's Construction General Permit, including the preparation and implementation of a Stormwater Pollution Prevention Plan, would ensure that the project would result in less-than-significant impacts related to erosion or loss of topsoil during construction.

During operation of the project, the school campus portion of the project site would be developed with buildings, pavement surfaces, and landscaping, and the future City park portion of the project site would be covered with a layer of aggregate base material for the period following construction of the school campus and until the park is developed by the City of Mountain View. These features would minimize the potential for post-development erosion. Therefore, operation of the project would result in less-than-significant impacts related to erosion or loss of topsoil.

*Settlement/Subsidence/Collapse*

*The project would not result in soil settlement, subsidence, or collapse.*

The project would not substantially alter the existing grades or elevation of the project site through placement of fill materials; therefore, placement of fill material on the project site would not be expected to result in significant settlement of underlying soil. Depending on soil conditions at the project site, loads from new structures constructed on the project site could trigger static settlement of underlying soils, and seismic settlement of soil underlying the project site could also occur. As discussed above, the project must be designed and constructed in accordance with the California Building Code, the Field Act, and site-specific recommendations from a site-specific geohazard report approved by CGS and DSA. Recommendations from the site-specific geohazard report would include recommendations that would address the potential for impacts related to both static and seismic settlement, if present. Therefore, the project would have less-than-significant impacts related to static or seismic settlement.

Subsidence or collapse can result from the removal of subsurface water. As discussed under *Environmental Setting* above, groundwater has been encountered beneath the project site at depths of approximately 15 to 20 feet. Groundwater dewatering is not anticipated to be required for the project; however, if construction-related dewatering would be required, it would be temporary, limited to shallow groundwater, and localized in the areas of excavations. Therefore, potential impacts related to subsidence and collapse would be less than significant.

*Expansive Soils*

*The project would not create substantial direct or indirect risks to life or property due to expansive soils.*

As discussed above, the project must be designed and constructed in accordance with the California Building Code, the Field Act, and site-specific recommendations from a site-specific geohazard report approved by CGS and DSA. Recommendations from the site-specific geohazard report would include recommendations that would address the potential for impacts related to expansive soil conditions, if present. Such recommendations typically include the use of non-expansive engineered fill beneath building foundations and pavement, if necessary. Therefore, the project would have a less-than-significant impact related to expansive soil conditions.

## Potentially Significant Impacts

*Paleontological Resources or Unique Geologic Features*

**Impact GEO-1: The project could directly or indirectly destroy a unique paleontological resource or site. (PS)**

There are no unique geologic features at the project site; therefore, the project would have no impacts related to unique geologic features. As discussed under *Environmental Setting* above, paleontological resources could be present in relatively shallow soil at the project site.

The project would include excavation activities for construction of foundation features and utilities, which could potentially encounter and damage or destroy paleontological resources. The potential for damage or destruction of paleontological resources during construction of the project is a potentially significant impact, requiring mitigation. Implementation of Mitigation Measure GEO-1 below would ensure that this potential impact would be less than significant.

> *Mitigation Measure GEO-1: Before the start of any excavation activities, the Los Altos School District (LASD) shall retain a qualified paleontologist, as defined by the Society of Vertebrate Paleontology (SVP), who is experienced in training construction personnel regarding paleontological resources. The qualified paleontologist shall train all construction personnel who are involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils that could be seen during construction, and proper notification procedures should fossils be encountered. Should any paleontological resources be encountered during construction activities, all ground-disturbing activities within 50 feet of the find shall be ceased and LASD shall be notified immediately. LASD shall immediately notify the qualified paleontologist and request that they assess the situation based on SVP standards, consult with agencies as appropriate, and make recommendations for the treatment of the discovery if found to be significant. If construction activities cannot avoid a significant paleontological resource, the qualified paleontologist shall salvage the paleontological resource and recommend additional measures (as needed) to minimize adverse effects on paleontological resources. Additional measures may include on-site monitoring by the qualified paleontologist of future excavation activities; identification, cataloging, curation, and provision for repository storage of prepared fossil specimens; preparation of a technical report on the finds and their significance; and provision of the salvaged fossil material and technical report to a paleontological repository, such as the University of California Museum of Paleontology. Public educational outreach may also be appropriate. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to LASD for review. The above measures shall be included in contract specifications. (LTS)*

## Cumulative Impacts

This section evaluates cumulative impacts on geology and soils. This analysis examines the effects of the project in the relevant geographic area in combination with other current projects and probable future projects. Cumulative impacts are addressed only for those significance criteria for which the project would have an impact, whether it be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular criterion, by definition, it would not contribute to a cumulative impact, and therefore no analysis would be required.

Potential impacts related to geology, soils, and paleontological resources generally do not extend far beyond an individual development's boundaries because each development may have unique geologic and paleontological considerations. Therefore, the potential for cumulative impacts is generally limited to individual development sites and adjacent sites. For this reason, potential impacts are typically confined to discrete spatial locations and do not combine to create a significant cumulative impact. The exception to this generalization would occur where larger-scale geologic events, such as a large landslide or regional subsidence/settlement, might affect surrounding areas.

As discussed under *Landslides* above, the project would have no impacts related to landslides. Potential impacts related to seismic hazards, soil erosion, collapse of unstable soil, expansive soils, and paleontological resources would be specific to the project site and would not combine with other projects to create a cumulative impact.

The geographic context for the analysis of potential cumulative impacts related to settlement/subsidence of unstable soil is the project site and adjacent properties. As discussed under *Settlement/Subsidence/Collapse* above, the project would not substantially alter the existing grades or elevation of the project site through placement of fill materials, and although loads from new structures constructed on the project site could trigger static settlement of underlying soils, such settlement would not be expected to be significant, nor would it be expected to affect off-site areas based on the relatively lightweight (one- to two-story) structures that are proposed under the project. Groundwater dewatering is not anticipated to be required for the project; however, if construction-related dewatering would be required, it would be temporary, limited to shallow groundwater, and localized in the areas of excavations. Therefore, the project would not result in a cumulatively considerable impact related to settlement or subsidence of unstable soil, and this cumulative impact would be less than significant.

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# 4.7 GREENHOUSE GAS EMISSIONS

## INTRODUCTION

This section describes the existing greenhouse gas (GHG) emissions within the City of Mountain View and the San Francisco Bay Area Air Basin (SFBAAB); discusses the regulations and policies pertinent to GHG emissions; and assesses the potentially significant impacts that could result from implementation of the project.

## ENVIRONMENTAL SETTING

### Climate Change and GHG Emissions

Climate change refers to change in the Earth's weather patterns, including the rise in temperature due to an increase in heat-trapping GHGs in the atmosphere. Existing GHGs allow about two-thirds of the visible and ultraviolet light from the sun to pass through the atmosphere and be absorbed by the Earth's surface. To balance the absorbed incoming energy, the surface radiates thermal energy back to space at longer wavelengths primarily in the infrared part of the spectrum. Much of the thermal radiation emitted from the surface is absorbed by the GHGs in the atmosphere and is re-radiated in all directions. Since part of the re-radiation is back toward the surface and the lower atmosphere, the global surface temperatures are elevated above what they would be in the absence of GHGs. This process of trapping heat in the lower atmosphere is known as the greenhouse effect.

An increase of GHGs in the atmosphere affects the energy balance of the Earth and results in a global warming trend. Increases in global average temperatures have been observed since the mid-20th century and have been linked to observed increases in GHG emissions from anthropogenic sources. The primary GHG emissions of concern are carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O). Other GHGs of concern include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6), but their contribution to climate change is less than 1 percent of the total GHGs that are well-mixed (i.e., that have atmospheric lifetimes long enough to be homogeneously mixed in the troposphere) (IPCC, 2013). Each GHG has a different global warming potential. For instance, CH4 traps about 28 times more heat per molecule than CO2 (IPCC, 2014). As a result, emissions of GHGs are reported in metric tons of carbon dioxide equivalents (CO2e), wherein each GHG is weighted by its global warming potential relative to CO2.

Ice-core records of historical atmospheric CO2 concentrations, which currently extend back about 800,000 years, indicate that CO2 concentrations naturally fluctuate between glacial and interglacial periods. According to the Intergovernmental Panel on Climate Change (IPCC), over the past few hundred years the atmospheric concentrations of CO2 have increased to unprecedented levels compared to previous fluctuations in CO2 concentrations observed over the past 800,000 years due to anthropogenic sources. In 2011, concentrations of CO2, CH4, and N2O exceeded the pre-industrial era (before 1750) by about 40, 150, and 20 percent, respectively (BAAQMD, 2015). Based on measurements of the Earth's global average surface temperature, eight of the top 10 warmest years on record since 1880 have occurred in the last decade (NASA, 2022).

The global increases in $CO_2$ concentration are due primarily to fossil fuel combustion and land use change (e.g., deforestation). The dominant anthropogenic sources of $CH_4$ are from ruminant livestock, fossil fuel extraction and use, rice paddy agriculture, and landfills, while the dominant anthropogenic sources of $N_2O$ are from ammonia for fertilizer and industrial activity. Emissions of HFCs, PFCs, and $SF_6$ are not naturally occurring; they originate from industrial processes such as semiconductor manufacturing, their use as refrigerants and other products, and electric power transmission and distribution (BAAQMD, 2015).

## Existing GHG Emission and Projections

The California Air Resources Board (CARB) estimated that, in 2019, transportation was responsible for about 40 percent of California's GHG emissions, followed by industrial sources and electrical power generation at about 21 percent and 14 percent, respectively (CARB, 2021). GHG emissions for 2020 were available but not used because 2020 was an outlier due to the global pandemic. In 2015, 85 million metric tons of $CO_2e$ were emitted from anthropogenic sources within the San Francisco Bay Area Air Basin (SFBAAB). Emissions of $CO_2$ dominate the GHG inventory in the SFBAAB, accounting for about 90 percent of the total $CO_2e$ emissions reported (BAAQMD, 2017). The 2015 GHG emissions in the SFBAAB are summarized in **Table 4.7-1**.

**TABLE 4.7-1 SAN FRANCISCO BAY AREA 2015 GREENHOUSE GAS EMISSIONS INVENTORY**

| **Pollutant** | **Percent** | **CO2e (MMT/Year)** |
|---|---|---|
| CO2 | 90 | 76.5 |
| CH4 | 4 | 3.4 |
| N2O | 2 | 1.7 |
| HFC, PFC, SF6 | 4 | 3.4 |
| **Total** | **100** | **85** |

Notes: CO2e = carbon dioxide equivalents; CO2 = carbon dioxide; CH4 = methane; N2O = nitrous oxide; HFC = hydrofluorocarbon; PFC = perfluorocarbon; SF6 = sulfur hexafluoride; MMT = million metric tons
Source: Bay Area Air Quality Management District (BAAQMD), 2017.

The City of Mountain View's community-wide GHG emissions inventories for the years 2005 and 2018 (which is the most recent year of final data available) are summarized in **Table 4.7-2** for various land-use sectors. As shown in Table 4.7-2, GHG emissions dropped from about 704,052 metric tons of $CO_2e$ in 2005 to 604,318 metric tons of $CO_2e$ in 2018, which is a 14 percent reduction. Most emissions reductions between 2015 and 2018 came from the transportation and energy sectors, driven by cleaner sources of electricity, more efficient and cleaner-fuel vehicles, and lower vehicle miles traveled (VMT) per capita.

**TABLE 4.7-2 CITY OF MOUNTAIN VIEW GREENHOUSE GAS EMISSIONS SUMMARY BY SECTOR (IN METRIC TONS OF CARBON DIOXIDE EQUIVALENTS [CO2E])**

| Sector | Subsector | 2005 | 2015 | 2018 |
|---|---|---|---|---|
| Energy – Residential | Electricity | 36,307 | 27,221 | 801 |
| | Natural Gas | 64,065 | 53,566 | 57,416 |
| Energy – Non-Residential | Electricity | 138,119 | 130,021 | 42,833 |
| | Natural Gas | 57,071 | 56,031 | 57,098 |
| Transportation | Passenger/Light Duty | 309,162 | 413,676 | 342,312 |
| | Medium/Heavy Duty | 64,915 | 43,243 | 54,007 |
| Waste | Solid Waste | 12,248 | 17,312 | 12,820 |
| | Alternative Daily Cover | 77 | 16 | 0.4 |
| Water | Water Demand | 4,384 | 1,633 | 84 |
| | Wastewater Treatment | 11,144 | 5,648 | 3,208 |
| Off-Road Mobile | Construction, Lawn/Garden, Commercial Equipment, and Industrial Equipment | 6,560 | 43,796 | 33,739 |
| **Total** | | **704,052** | | **604,318** |
| | | **Reduction from 2005 by 2018** | | 14% |

Source: City of Mountain View, 2021.

## Effects of GHG Emissions

According to the Bay Area Air Quality Management District (BAAQMD), some of the potential effects of increased GHG emissions and associated climate change may include loss of snowpack (affecting water supply), more frequent extreme weather events, more large forest fires, more drought years, and sea level rise. In addition, climate change may increase electricity demand for cooling, decrease the availability of hydroelectric power, and affect regional air quality and public health (BAAQMD, 2017).

In October 2018, the IPCC published a special report on potential long-term climate change impacts based on the projected increases in temperature due to global climate change. The IPCC report found that the Earth is already seeing the consequences of global warming due to a 1 degree Celsius (°C) increase in pre-industrial levels, such as extreme weather, rising sea levels, and diminishing Arctic sea ice. Global warming is likely to reach 1.5°C above pre-industrial levels between 2030 and 2050 if it continues to increase at the current rate. Some of the impacts due to ongoing global warming could be avoided by limiting future global warming to 1.5°C compared to 2°C. For example, by limiting global warming to 1.5°C or lower, the likelihood of an Arctic Ocean free of sea ice in summer would be ten times lower compared to the likelihood under the scenario of 2°C increase. Beyond the 1.5°C threshold, there would be significant increases in the risk associated with long-lasting or irreversible changes, such as the loss of ecosystems. The IPCC states that to limit the global warming to 1.5°C, rapid transitions are needed in land, energy, industry, building, transport, and urban sectors to reach the goal of carbon neutrality by 2050, which means that the Earth's anthropogenic GHG emissions each year would be removed completely through carbon offsetting, sequestration, or other means (IPCC, 2018).

## REGULATORY FRAMEWORK

### Federal Regulations

*Federal Climate Action Goals*

The United States (U.S.) participates in the United Nations Framework Convention on Climate Change. In 1998, the U.S. signed the Kyoto Protocol, which would have required reductions in GHGs; however, the protocol did not become binding in the U.S. as it was never ratified by Congress. Instead, the federal government chose voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science. In 2002, the U.S. announced a strategy to reduce the GHG intensity of the American economy by 18 percent over a 10-year period from 2002 to 2012. In 2015, the U.S. submitted its "intended nationally determined contribution" to the framework convention, which targets to cut net GHG emissions by 26 to 28 percent below 2005 levels by 2025.

The U.S. Environmental Protection Agency (EPA) is responsible for enforcing the federal Clean Air Act and the 1990 amendments to it. On April 2, 2007, the U.S. Supreme Court ruled that CO2 is an air pollutant as defined under the Clean Air Act, and that the EPA has the authority to regulate emissions of GHGs (U.S. Supreme Court, 2007). The EPA made two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act, as follows:

- **Endangerment Finding:** The current and projected concentrations of the six key well-mixed GHGs (CO2, CH4, N2O, HFCs, PFCs, and SF6) in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, they were a prerequisite for implementing GHG emissions standards for vehicles.

*Federal Vehicle Emission Regulations*

The EPA has established national GHG emission and fuel economy regulations for vehicles that would achieve substantial GHG emissions reductions along with reductions in other criteria pollutants. Some of the key EPA regulations related to GHG emissions from vehicles are as follows:

- In 2010, the EPA in collaboration with the National Highway Traffic Safety Administration (NHTSA) finalized updated Corporate Average Fuel Economy (CAFE) and GHG emissions standards for passenger cars and light trucks light-duty vehicles for model years 2012 to 2016.

- In 2012, the EPA and NHTSA extended the CAFE and GHG emissions standards for light-duty vehicles for model years 2017 to 2025. Combined with the 2012 to 2016 standards, the regulation will result in vehicles emitting 50 percent less than 2010 levels in 2025.
- In 2016, the EPA and NHTSA finalized national GHG emission and fuel economy standards for medium- and heavy-duty vehicles that would cover model years 2018 to 2027 for certain trailers and model years 2021 to 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks.
- In 2020, the EPA and NHTSA finalized updated CAFE and GHG emissions standards for passenger cars and light trucks and established new standards, covering model years 2021 through 2026.
- In 2021, the EPA revised the GHG emissions standards for passenger cars and light trucks for model years 2023 through 2026 to leverage advances in clean car technology.
- In 2022, the NHSTA revised the CAFE standards for passenger cars and light trucks for model years 2024 to 2026. These standards are expected to result in average fuel economy label values of 49 miles per gallon.

## State Regulations

The State of California has set ambitious GHG emission reduction targets for the next 30 years. As described below, the state has implemented a range of regulatory programs to help achieve statewide climate action goals.

*California Climate Action Goals*

The State of California has established the following long-term climate action goals:

- **Assembly Bill (AB) 32**: Reduce GHG emissions to 1990 levels by 2020.
- **Senate Bill (SB) 32**: Reduce GHG emissions to 40 percent below 1990 levels by 2030.
- **AB 1279**: Achieve carbon neutrality as soon as possible, but no later than 2045 and maintain net negative GHG emissions thereafter; and reduce GHG emissions to 85 percent below 1990 levels by 2045.

*California Vehicle Emission Regulations*

The State of California has established statewide GHG emission and fuel economy regulations for vehicles that align with or supersede the national standards. The key state regulations related to GHG emissions from vehicles are as follows:

- The Pavley Regulations (AB 1493), as amended in 2009, required a 30 percent reduction in state GHG emissions from new passenger vehicles from 2009 through 2016.
- The Advanced Clean Cars Program extends the Pavley Regulations beyond 2016 and established a technology mandate for zero-emission vehicles.
- The Advanced Clean Cars II Program requires all new passenger cars, trucks, and sport utility vehicles sold in California to be zero-emission vehicles by 2035.

- The Low-Carbon Fuel Standard (Executive Order S-1-07), as amended in 2019, requires a 20 percent reduction in the carbon intensity of California's transportation fuels by 2030.
- SB 375 establishes regional GHG reduction targets from passenger vehicles for the years 2020 and 2035 by requiring metropolitan planning organizations (MPOs) to develop and implement Sustainable Communities Strategies that align regional transportation planning efforts with regional housing allocation needs.

*California Energy Efficiency Regulations*

The State of California has established statewide energy efficiency regulations, including programs that increase the statewide procurement of renewable energy. The key state regulations related to GHG emissions from energy use are as follows:

- The Renewable Portfolio Standard Program, as updated in 2018 (SB 100), requires the state to procure 60 percent of its electricity from renewable sources by 2030 and 100 percent from carbon-free sources by 2045.
- SB 1020 expanded on SB 100 to require 90 percent of all retail electricity sales by 2035 and 95 percent of all retail electricity sales by 2040 to be supplied by renewable energy resources and zero-carbon resources.
- Title 24 Building Efficiency Standards are updated every three years with the long-term vision to support zero-net energy for all new single-family and low-rise residential buildings by 2020 and new high-rise residential and nonresidential buildings by 2030.
- Title 24 California Green Building Standards, referred to as the CALGreen Code, aim to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) environmental air quality.

*California Cap-and-Trade Program*

The Cap-and-Trade Program is a key element of California’s strategy to reduce GHG emissions from covered entities[1] that are responsible for about 85 percent of California’s GHG emissions. The program establishes a declining limit on major sources of GHG emissions throughout California, and it creates a powerful economic incentive for significant investment in cleaner and more efficient technologies. CARB creates allowances equal to the total amount of permissible GHG emissions (i.e., the “cap”). Each year, fewer allowances are created and the annual cap declines. As a result, the annual auction reserve price for allowances increases, which creates a steady and sustained carbon price signal to incentivize actions to reduce GHG emissions and enable a smooth transition to a cleaner economy.

[1] The program’s covered entitities include electric power plants, fuel distributors (natural gas and petroleum), and large industrial facilities that emit more than 25,000 million metric tons of CO2e per year.

*California's Short-Lived Climate Pollutant Reduction Strategy*

The Short-Lived Climate Pollutant (SLCP) Reduction Strategy is California's plan for reducing emissions of high global-warming potential gases with short atmospheric lifetimes (CARB, 2017a). SLCPs include methane, HFCs, and anthropogenic black carbon. In accordance with SB 1383, the SLCP Reduction Strategy has set the following targets for statewide reductions in SLCP emissions:

- 40 percent below 2013 levels by 2030 for methane and HFCs.
- 50 percent below 2013 levels by 2030 for anthropogenic black carbon.

The SLCP Reduction Strategy also provides specific direction for reductions from dairy and livestock operations and from landfills by diverting organic materials.

*California's Climate Change Scoping Plan*

In December 2008, CARB adopted the Climate Change Scoping Plan to identify how the state can achieve its 2020 climate action goal under AB 32. In 2017, CARB updated the Scoping Plan to identify how the state can achieve its 2030 climate action goal under SB 32, and substantially advance toward its 2050 climate action goal under Executive Order S-3-05. The 2017 Scoping Plan includes the regulatory programs identified above, such as the Advanced Clean Cars Program, Low-Carbon Fuel Standard, Renewable Portfolio Standard Program, energy efficiency standards, SLCP Reduction Strategy, and Cap-and-Trade Program (CARB, 2017b).

In December 2022, CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan), which outlines a roadmap to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045 (CARB, 2022b). Building on the 2017 Scoping Plan, the 2022 Scoping Plan evaluates the progress made toward meeting the 2030 GHG reduction target established in SB 32 and identifies a technologically feasible, cost-effective, and equity-focused path to achieve carbon neutrality by 2045. The 2022 Scoping Plan presents an approach for an aggressive reduction of fossil fuels and a rapid transition to renewable energy resources and zero-emission vehicles. The 2022 Scoping Plan identifies actions and outcomes such as rapidly moving to zero-emission transportation; electrifying cars, buses, trains, and trucks; phasing out the use of fossil gas used for heating homes and buildings; clamping down on chemicals and refrigerants; providing communities with sustainable options for walking, biking, and public transit; building out clean, renewable energy resources (such as solar arrays and wind turbine capacity) to displace fossil-fuel fired electrical generation; and scaling up new options such as renewable hydrogen and biomethane. Appendix D of the 2022 Scoping Plan includes recommendations for local government to take actions that align with the state's climate goals, with a focus on local climate action plans and local authority over new residential and mixed-use development. Appendix D of the 2022 Scoping Plan recommends for local jurisdictions to focus on three priority areas when preparing a climate action plan: transportation electrification, VMT reduction, and building decarbonization.

## Regional and Local Regulations and Policies

The BAAQMD is the regional government agency that regulates sources of GHG emissions within the SFBAAB. The BAAQMD established a climate protection program that includes measures that promote energy efficiency, reduce regional VMT, and develop alternative sources of energy, all of which assist in reducing emissions of GHGs and in reducing air pollutants that affect the health of residents. The BAAQMD also seeks to support current climate protection programs in the region and to stimulate additional efforts through public education and outreach, technical assistance to local governments and other interested parties, and promotion of collaborative efforts among stakeholders.

*BAAQMD 2017 Clean Air Plan*

The BAAQMD and other air districts prepare clean air plans in accordance with the state and federal Clean Air Acts. In April 2017, the BAAQMD adopted the 2017 Clean Air Plan: Spare the Air, Cool the Climate, which is a comprehensive plan to improve Bay Area air quality and protect public health through implementation of a control strategy designed to reduce emissions and ambient concentrations of harmful pollutants. The 2017 Clean Air Plan also includes measures designed to reduce GHG emissions.

*City of Mountain View 2030 General Plan*

The City of Mountain View 2030 General Plan (City of Mountain View, 2012) includes the following policies related to GHG emissions:

Policy INC 5.2: *Citywide water conservation.* Reduce water waste and implement water conservation and efficiency measures throughout the city.

Policy INC 5.3: *Water reuse.* Remove barriers and provide guidance for the use of rainwater and graywater as alternative water supplies.

Policy INC 5.4: *Smart water meters.* Encourage water meter technologies that provide water usage feedback to customers.

Policy INC 5.5: *Landscape efficiency.* Promote water-efficient landscaping including drought-tolerant and native plants, along with efficient irrigation techniques.

Policy INC 5.6: *Indoor efficiency.* Promote the use of water-efficient fixtures and appliances.

Policy INC 7.1: *Citywide recycled water use.* Promote, require or offer incentives for using recycled water as an alternative to potable water.

Policy INC 7.2: *Recycled water system.* Expand the use and availability of recycled water throughout the city.

Policy INC 7.4: *Recycled water and trees.* Promote appropriate tree and landscape species irrigated by recycled water.

Policy INC 10.2: *Producer responsibility.* Support extended producer responsibility to reduce waste and toxicity at the manufacturing level.

Policy INC 10.3: *Source reduction.* Encourage and promote source reduction behavior such as utilizing reusable, returnable and repairable goods.

Policy INC 10.4: *Construction waste reuse.* Encourage building deconstruction and reuse and construction waste recycling.

Policy INC 10.5: *Reuse.* Encourage product reuse through venues such as garage sales, lending libraries and Internet-based sharing and reuse forums.

Policy INC 10.6: *Recovered materials.* Encourage uses for recovered materials that save energy, avoid releasing toxic substances and extend the useful life of recovered materials.

Policy INC 10.7: *Recycled material demand.* Promote increased demand for recycled materials.

Policy INC 10.10: *Single-use products.* Discourage the use of single-use products.

Policy INC 13.2: *Alternatives to gasoline.* Promote and increase the use of new technologies as alternatives and supplements to gasoline in vehicles throughout the community.

Policy INC 14.1: *Renewable energy.* Promote the deployment of renewable energy technologies throughout the city.

Policy INC 14.2: *Solar energy.* Encourage active and passive solar energy use.

Policy INC 15.1: *Green building program.* Administer a forward-looking green building program that promotes best practices for green building in new and existing buildings.

Policy INC 15.3: *Citywide green building.* Support green building technologies and innovations throughout the city.

Policy MOB 9.1: *Greenhouse gas emissions.* Develop cost-effective strategies for reducing greenhouse gas emissions in coordination with the Greenhouse Gas Reduction Program.

Policy MOB 9.2: *Reduced vehicle miles traveled.* Support development and transportation improvements that help reduce greenhouse gas emissions by reducing per capita vehicle miles traveled.

Policy MOB 9.3: *Low-emission vehicles.* Promote use of fuel-efficient, alternative fuel and low-emission vehicles.

*LASD Policy*

LASD has not adopted any regulations and policies pertaining to greenhouse gas emissions.

# ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

## Significance Criteria

Implementation of the proposed project would result in a significant GHG impact if it would:

a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Climate change is not caused by any individual emissions source but by a large number of sources around the world emitting GHGs that collectively create a significant cumulative impact. The California Environmental Quality Act (CEQA) requires agencies in California to analyze such impacts by evaluating whether a proposed project would make a “cumulatively considerable” contribution to the significant cumulative impact on climate change. The BAAQMD’s recommended thresholds of significance for GHG emissions are intended to assist public agencies in determining whether proposed projects would make a cumulatively considerable contribution to global climate change, as required by CEQA. The thresholds identify design elements that an individual project needs to incorporate to do its “fair share” in achieving the state’s goals to reduce GHG emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045. The GHG thresholds for land use projects include two options, as follows (BAAQMD, 2023):

**Option 1.** Projects must include, at a minimum, the following project design elements:

<u>Buildings</u>

a) The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).

b) The project will not result in any wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.

<u>Transportation</u>

a) Achieve compliance with EV requirements in the most recently adopted version of CALGreen Tier 2.

b) Achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor’s Office of Planning and Research’s Technical Advisory on Evaluating Transportation Impacts in CEQA:
   i. Residential projects: 15 percent below the existing VMT per capita
   ii. Office projects: 15 percent below the existing VMT per employee
   iii. Retail projects: no net increase in existing VMT

**Option 2.** Be consistent with local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

A proposed project that meets at least one of these thresholds would support the state's ability to achieve its climate goals and thus would have a less-than-significant impact on GHG emissions. In this analysis, the project's impact was evaluated against Option 1 listed above. Option 2 is not used because LASD has not adopted any GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5 (b). As a school district, LASD is not subject to the City of Mountain View's climate action plans and policies.

## Less-than-Significant Impacts

*Generation of Greenhouse Gas Emissions*

*The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.*

Emissions from Project Construction

Construction activities would generate GHG emissions from several sources, such as the operation of on-site heavy construction equipment and off-site construction vehicle trips, vendor vehicle trips, and worker commute trips. The BAAQMD does not recommend a threshold of significance for GHG emissions during construction because there is not sufficient evidence to determine a level at which temporary construction emissions are significant. A construction contractor would also have no incentive to waste fuel during construction and, therefore, it is generally assumed that GHG emissions during construction would be minimized to the maximum extent feasible. Therefore, GHG emissions from construction of the project would have a less-than-significant impact on the environment.

Emissions from Project Operations

The project's consistency with the BAAQMD's recommended design elements (Option 1 threshold) is evaluated in **Table 4.7-3**. As presented in Table 4.7-3, the project is designed to incorporate all four design elements. Therefore, the project would contribute its "fair share" to achieve the state's climate goals and have a less-than-significant GHG emissions impact.

*Conflict with Greenhouse Gas Plans, Policies, or Regulations*

*The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.*

Consistency with 2022 Scoping Plan

As discussed above, the project would incorporate all four design elements identified in the BAAQMD GHG thresholds of significance. The thresholds of significance for GHG emissions recommended in the BAAQMD CEQA Guidelines are designed to ensure that an individual project would do its "fair share" in achieving the state's goals to reduce GHG emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045, which is consistent with the goals of the 2022 Scoping Plan.

**TABLE 4.7-3 PROJECT CONSISTENCY WITH DESIGN ELEMENTS IDENTIFIED IN BAY AREA AIR QUALITY MANAGEMENT DISTRICT (BAAQMD) GREENHOUSE GAS (GHG) THRESHOLD**

| Design Element | | Project Consistency |
|---|---|---|
| Buildings | No Natural Gas | **Consistent**. According to the Los Altos School District (LASD), the project would use an all-electric building design and would not include natural gas uses. |
| | No Wasteful, Inefficient, or Unnecessary Energy Usage | **Consistent**. As discussed in *Section 4.5, Energy*, of this EIR, the project would comply with the current Title 24 Building Energy Efficiency Standards. In addition, LASD has adopted a 2030 Zero Net Energy (ZNE) goal (Gelfand, 2022), which would be achieved by applying measures such as installing solar panels, eliminating natural gas use, installing electrical vehicle (EV) infrastructure, and purchasing green power. By achieving ZNE by 2030 and applying energy efficiency and reduction measures, energy consumption during project operation would not be inefficient, wasteful, or unnecessary. |
| Transportation | California Green Building Standards (CALGreen) Tier 2 Electric Vehicle Requirement | **Consistent**. According to LASD, the project would comply with EV requirements in the most recently adopted version of CALGreen Tier 2. The project would remove the existing 461 parking spaces on the project site and install 51 new parking spaces. In accordance with Section A5.106.5.3.2 Tier 2, 17 spaces would be EV capable spaces and 6 out of the 17 spaces would be provided with Electric Vehicle Supply Equipment (EVSE). |
| | Project-Generated Vehicle Miles Traveled (VMT) Reduction | **Consistent**. As discussed in *Section 4.14, Transportation*, of this EIR, the project would result in a net reduction of 8,259 vehicle trips per day and reduce regional VMT. |

Source: BAAQMD, 2023.

The project includes key attributes that are consistent with the priority GHG reduction strategies identified in Appendix D of the 2022 Scoping Plan, such as transportation electrification, VMT reduction, and building decarbonization. As discussed above, the project would result in a reduction in VMT compared to the existing condition and provide EV charging infrastructure that meets the most recently adopted version of CALGreen Tier 2 requirements. The project would use all-electric appliances and would not include natural gas uses. Moreover, the project would be designed to achieve a ZNE goal by 2035 (Gelfand, 2022) by applying measures such as installing solar panels, eliminating natural gas use, installing EV infrastructure, and purchasing green power. The project would support the displacement of fossil-fuel fired electrical generation with renewable energy resources. Therefore, the project would not conflict with the 2022 Scoping Plan and this impact would be less than significant.

## Potentially Significant Impacts

No potentially significant impacts related to GHG emissions would result from the project.

### Cumulative Impacts

As discussed above, GHG impacts are, by their nature, cumulative impacts because one project by itself cannot significantly contribute to or cause significant environmental effects. The project would not result in or contribute to any significant cumulative GHG impacts because it would not generate GHG emissions that may have a significant impact on the environment or fundamentally conflict with the applicable plans and policies.

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# 4.8 HAZARDS AND HAZARDOUS MATERIALS

## INTRODUCTION

This section of the Draft Environmental Impact Report (EIR) provides an overview of potential hazards and hazardous materials at and near the project site and assesses potential impacts related to hazards and hazardous materials that could result from implementation of the proposed project.

## ENVIRONMENTAL SETTING

This section describes the existing conditions related to hazards and hazardous materials near the project site including subsurface contamination, hazardous building materials, aviation hazards, emergency evacuation and response, and wildfire conditions.

### Subsurface Contamination

Information regarding subsurface contamination at the project site was obtained from review of the Draft Preliminary Environmental Assessment (PEA) Report prepared for the project site in November 2022 (Terraphase Engineering Inc., 2022). The Draft PEA Report was prepared under the oversight of the California Environmental Protection Agency (Cal/EPA) Department of Toxic Substances Control (DTSC). The purpose of the PEA is to identify whether an existing release or threat of a future release of hazardous substances exists at the project site and to evaluate the potential risk to human health or the environment.

*Project Site Background*

The project site was mostly undeveloped and used as orchards prior to 1939. The western end of the site (435 San Antonio Road) was first developed by 1963. The two larger retail buildings and parking lots (the current Kohl's and 24-Hour Fitness buildings) at the project site were constructed in the mid-1970s. The smaller structure present at the northeastern corner of the project site (the sushi restaurant and café building) was constructed sometime between the late 1990s and early 2000s. The buildings have been used for commercial/retail stores since they were constructed.

*Results of Subsurface Investigations*

From February 2021 to August 2022, multiple environmental subsurface investigations were conducted at the project site, including the collection of soil, groundwater, and soil gas samples. Based on review of the analytical results, the following issues were identified in the Draft PEA Report:

- Naturally occurring asbestos (NOA), in the form of amphiboles (primarily actinolite), was detected in eight of the nine soil samples analyzed, and chrysolite asbestos was detected in two samples. In total, eight of the nine sample concentrations exceeded the DTSC School Unit screening criteria of 0.01 percent. Mitigation of shallow soils containing NOA would be necessary prior to development.

- Volatile organic compounds (VOCs) were detected in soil gas samples. Contaminants of potential concern include tetrachloroethylene (PCE), chloroform, chlorodibromomethane, bromodichloromethane, benzene, naphthalene, and 1,3-butadiene.

*Risk Screenings*

The Draft PEA Report determined the following risk screenings for soil, groundwater, and soil gas. It should be noted that the conclusions and recommendations regarding soil below exclude the findings and recommendations regarding NOA in soil, as discussed above, and that the Draft PEA Report developed risk-based screening levels for school worker and student exposure that are higher than screening levels for residential exposure scenarios.

<u>Soil and Groundwater</u>

None of the locations exhibited concentrations that would result in cumulative risk or hazard index (HI) estimates for residential exposure scenarios that would be greater than the risk management goals. Additional risk management action to address soil or groundwater exposures at the project site would not be warranted.

<u>Soil Gas</u>

None of the locations exhibited concentrations that would result in cumulative risk or HI estimates for school worker or student exposure scenarios that would be greater than the risk management goals. Cumulative risk and HI estimates were also calculated for a residential exposure scenario, but as the Los Altos School District (LASD) does not intend for the project site to be used for residential purposes at any time in the future, these calculations are included solely for comparison purposes and to meet DTSC guidance. Additional risk management action to address soil gas exposures at the project site would not be warranted.

*Draft PEA Report and DTSC Recommendations*

The Draft PEA Report recommended capping the project site with imported material that is certified as asbestos free in accordance with DTSC requirements and recommended that an asbestos dust management plan be prepared and submitted for DTSC and Bay Area Air Quality Management District (BAAQMD) approval prior to the start of construction.

In April 2023, DTSC issued a comment letter on the Draft PEA Report (DTSC, 2023). DTSC concurred with the recommendation for capping NOA-impacted soils and indicated that further action would be required at the project site to address NOA. DTSC also indicated that, depending on VOC concentrations, a land use covenant may be necessary to indicate the project site is not to be used for residential purposes without further investigation and/or mitigation of soil gas. DTSC requested that the Draft PEA Report be revised to present exposure values and equations used for vapor intrusion risk characterization. DTSC indicated that site-specific attenuation factors based on building assumptions are not considered a strong line of evidence to depart from a default, upper-bound assumption of vapor attenuation, and vapor intrusion inhalation risk should be assessed using the default soil gas-to-indoor air attenuation factor of 0.03 and receptor-specific (student and school worker) exposure values. DTSC also indicated that a bioattenuation factor for petroleum hydrocarbons may be applied if data for oxygen in soil gas is available (DTSC, 2023).

## Hazardous Building Materials

Hazardous materials are commonly found in building materials such as lead-containing paint, asbestos-containing materials, polychlorinated biphenyl (PCB)-containing materials and equipment, and mercury-containing lights and devices. Asbestos has been detected in building materials on the project site in the building at 350 Showers Drive (currently the Kohl's building) including in the joint compound of drywall and in floor tiles and floor tile mastic (Terraphase Engineering Inc., 2022). A comprehensive survey for hazardous building materials has not been performed for the project site and based on the age of the buildings on the project site, other hazardous building materials could be present.

*Asbestos*

Asbestos is a known human carcinogen that was commonly used in building materials until the early 1980s. In 1989, the United States Environmental Protection Agency (EPA) issued a final rule banning most asbestos-containing products. In 1991, this regulation was overturned and as a result of the court's decision, the 1989 asbestos regulation only bans new uses of asbestos in products that would be initiated *for the first time* after 1989 and bans the following specific asbestos-containing products: flooring felt, rollboard, and corrugated, commercial, or specialty paper (EPA, 2023). Asbestos-containing products remain in use within the United States and include some roof and non-roof coatings and other asbestos-containing building materials (EPA, 2017). Section 19827.5 of the California Health and Safety Code requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos.

*Lead*

Prior to 1978, lead compounds were commonly used in exterior and interior paints. Due to its health effects, the application of lead-based paint on residential structures was banned in 1978; however, lead-based paint can be found in commercial or industrial structures, regardless of construction date (because its use is still allowed in commercial and industrial applications) (DTSC, 2006).

*PCBs*

PCBs were historically used as coolants and lubricants in transformers, capacitors, heating/cooling equipment, and other electrical equipment, and were also used as plasticizers in paints, plastics, rubber products, and caulking. PCBs have been demonstrated to cause cancer and a variety of other adverse health effects in animals, including effects on the immune system, reproductive system, nervous system, and endocrine system. Although manufacturing of PCBs has been banned in the United States since 1979, they may still be found in older electrical equipment and other building materials such as light ballasts and caulking. PCBs or PCBs-contaminated items require proper off-site transport and disposal at a facility that can accept such wastes, in accordance with the Toxic Substances Control Act (TSCA) of 1976 and other federal and state regulations. PCBs in manufactured materials such as caulking may also move directly into adjoining materials, particularly porous materials such as wood, concrete, and other types of masonry (EPA, 2015a).

The EPA has indicated that there was potential widespread use of PCB-containing building materials in buildings built or renovated between about 1950 and 1979. Prior to removal, EPA recommends PCB testing of caulk and other building materials that are going to be removed to determine what protections are needed during removal and to determine proper disposal requirements (EPA, 2015b).

*"Universal Wastes"*

Fluorescent lighting tubes and ballasts, computer displays, and several other common items containing hazardous materials (including mercury, a heavy metal) are regulated as "universal wastes" by the State of California. Universal waste regulations allow common, low-hazard wastes to be managed under less stringent requirements than other hazardous wastes. Management of other hazardous wastes is governed by DTSC hazardous waste rules.

## Aviation Hazards

Airport-related hazards are generally associated with aircraft accidents, particularly during takeoffs and landings. Other airport operation hazards include incompatible land uses, power transmission lines, wildlife hazards (e.g., bird strikes), and tall structures that penetrate the regulated surfaces surrounding an airport.

The nearest airports to the project site are the Palo Alto Airport located approximately 3.5 miles north of the project site, and Moffett Federal Airfield located approximately 3 miles east of the project site. The project site is located outside of the Airport Influence Area (AIA) of the Palo Alto Airport (Windus, Walter B., 2008) and Moffett Federal Airfield (Windus, Walter B., 2012). The AIA is a composite of the areas surrounding these airports that are affected by noise, height, and safety considerations within which all development projects must be evaluated by local agencies to determine how the Airport Comprehensive Land Use Plan may affect the proposed development.

## Accidental Hazardous Materials Incidents

Santa Clara County and its incorporated cities have experienced many localized accidental hazardous materials incidents. Four major highways in the county provide vehicle routes for the transportation of large quantities of hazardous materials: U.S.101, Interstate (I)-880, I-680, and I-280. U.S. 101 and I-880 carry the most truck traffic and are the most frequent location of hazardous materials spills on major roads (Office of Emergency Services, County of Santa Clara and Santa Clara County Fire, 2017).

## Wildfire Conditions

The project site is in a highly urbanized area and not located near heavily vegetated areas or wildlands that could be susceptible to wildfire. The project site and surrounding areas are not located within or near a State Responsibility Area or a Very High Fire Hazard Severity Zone as mapped by the California Department of Forestry and Fire Protection (CAL FIRE, 2008).

# REGULATORY FRAMEWORK

## Federal and State Regulations

*United States Environmental Protection Agency (EPA) Responsibilities*

The EPA is the federal agency responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials and hazardous waste. The federal regulations are primarily codified in Title 40 of the Code of Federal Regulations. The legislation includes the Resource Conservation and Recovery Act (RCRA) of 1976; the Superfund Amendments and Reauthorization Acts of 1986; the Comprehensive Environmental Response, Compensation, and Liability Act of 1980; and TSCA. The EPA provides oversight for site investigation and remediation projects, and has developed protocols for sampling, testing, and evaluation of solid wastes.

*Resource Conservation and Recovery Act (RCRA)*

RCRA is a combination of the first federal solid waste statutes and all subsequent amendments mandated by Congress. RCRA establishes the framework for a national system of solid waste control. Subtitle D of RCRA is dedicated to non-hazardous solid waste requirements, and Subtitle C focuses on hazardous solid waste. Solid waste includes solids, liquids, and gases and must be discarded to be considered waste. Under Subtitle C of RCRA, the EPA has developed a comprehensive program to ensure that hazardous waste is managed safely from the moment it is generated to its final disposal (cradle-to-grave) and may authorize states to implement key provisions of hazardous waste requirements in lieu of the federal government. If a state program does not exist, the EPA directly implements the hazardous waste requirements in that state. Subtitle C regulations set criteria for hazardous waste generators, transporters, and treatment, storage, and disposal facilities. This includes permitting requirements, enforcement, and corrective action or cleanup.

*Hazardous Materials Transportation Act (HMTA)*

The federal Hazardous Materials Transportation Act (HMTA) of 1975 is the statutory basis for the extensive body of regulations aimed at ensuring the safe transport of hazardous materials on water, rail, and highways and through air or pipelines. It includes provisions for material classification, packaging, marking, labeling, placarding, and shipping documentation.

*United States Department of Transportation (DOT) and State of California Responsibilities*

In 1990 and 1994, the federal HMTA was amended to improve the protection of life, property, and the environment from the inherent risks of transporting hazardous material in all major modes of commerce. The United States Department of Transportation (DOT) developed hazardous materials regulations that govern the classification, packaging, communication, transportation, and handling of hazardous materials, as well as employee training and incident reporting. The transportation of hazardous materials is subject to both RCRA and DOT regulations. The California Highway Patrol, California Department of Transportation (Caltrans), and DTSC are responsible for enforcing federal and state regulations pertaining to the transportation of hazardous materials.

*United States Department of Labor Occupational Safety and Health Administration (OSHA) Responsibilities*

Worker health and safety are regulated at the federal level by the Occupational Safety and Health Administration (OSHA). The Federal Occupational Safety and Health Act of 1970 authorizes states to establish their own safety and health programs with OSHA approval. Workers at hazardous waste sites (or workers who may be exposed to hazardous wastes that might be encountered during excavation of contaminated soils) must receive specialized training and medical supervision according to the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations. Additional regulations have been developed for construction workers potentially exposed to lead and asbestos.

*State of California Department of Toxic Substances Control (DTSC) Responsibilities*

In California, DTSC is authorized by the EPA to enforce and implement federal hazardous materials laws and regulations. California regulations pertaining to hazardous materials are as stringent as or more stringent than federal requirements. Most state hazardous materials regulations are contained in Title 22 of the California Code of Regulations (CCR) (see below). DTSC generally acts as the lead agency for soil and groundwater cleanup projects that have the potential to affect public health and establishes cleanup levels for subsurface contamination that are equal to or more restrictive than federal levels. DTSC has also developed land disposal restrictions and treatment standards for hazardous waste disposal in California. DTSC oversees the environmental evaluation and remediation of new and expanding schools that receive state funding as required by the California Education Code (see below), and is currently providing oversight for the environmental evaluation and remediation of the project site.

*California Education Code*

California Education Code Section 17213.1 requires that a Phase I Environmental Site Assessment (ESA) be prepared to evaluate whether there has been or may have been a release of hazardous materials, or whether naturally occurring hazardous materials may be present at a school site. When a Phase I ESA indicates the potential presence of contamination, a PEA may be required to evaluate the threat to human health or the environment. The PEA process includes collection of environmental samples and evaluation of potential health risks. If the PEA identifies no significant health or environmental risks and DTSC concurs with the PEA's conclusion, the school district will receive a "No Further Action" determination letter from DTSC and the process is complete.

California Education Code Section 17213.2 indicates that if the PEA identifies that a release of hazardous materials has occurred, that there is the threat of a release of hazardous materials, or that naturally occurring hazardous materials are present at concentrations that could pose a significant risk to children or adults, the school district would be required to enter into an agreement with DTSC to oversee a response action at the site. DTSC must notify the State Department of Education, the Division of the State Architect (DSA), and the Office of Public School Construction when DTSC certifies that all necessary response actions have been completed at a school site. DTSC must also notify DSA whenever a response action has an impact on the design of a school facility and must specify the conditions that must be met in the design of the school facility in order to protect the integrity of the response action.

*California Health and Safety Code*

Health and Safety Code Division 20, Chapter 6.5 - Hazardous Waste Control, is the primary hazardous waste statute in the State of California and implements RCRA as a “cradle-to-grave” waste management system in California. It specifies that generators have the primary duty to determine whether their wastes are hazardous and to ensure their proper management. It also establishes criteria for the reuse and recycling of hazardous wastes used or reused as raw materials. It exceeds federal requirements by mandating source reduction planning and a much broader requirement for permitting facilities that treat hazardous waste. It also regulates types of wastes and waste management activities that are not covered by federal law under RCRA.

*State Water Resources Control Board Responsibilities*

Under the Porter-Cologne Water Quality Control Act (California Water Code, Division 7), the State Water Resources Control Board (State Water Board) has authority over state waters and water quality. “Waters of the state” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (Water Code Section 13050[e]). The State Water Board enforces the Porter-Cologne Water Quality Control Act through its nine regional boards, including the San Francisco Bay Regional Water Quality Control Board (Regional Water Board or RWQCB), described below. The State Water Board issued the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Associated with Construction Activity (Construction General Permit), Order WQ-2022-0057-DWQ, which addresses management of hazardous materials at construction sites that disturb more than 1 acre of land (described in detail in *Section 4.9, Hydrology and Water Quality*, of this EIR).

*California Air Resources Board Responsibilities*

The California Air Resources Board (CARB) is responsible for coordination and oversight of state and local air pollution control programs in California, including implementation of the California Clean Air Act of 1988. CARB has developed state air quality standards and is responsible for monitoring air quality in conjunction with the local air districts.

*California Code of Regulations (CCR) Title 22*

Most state and federal regulations and requirements that apply to generators of hazardous waste are spelled out in California Code of Regulations (CCR) Title 22, Division 4.5. Title 22 contains the detailed compliance requirements for hazardous waste generators, transporters, and treatment, storage, and disposal facilities. Because California is a fully authorized state according to RCRA, most RCRA regulations (those contained in 40 Code of Federal Regulations [CFR] 260 et seq.) have been duplicated and integrated into Title 22. However, because DTSC regulates hazardous waste more stringently than the EPA does, the integration of California and federal hazardous waste regulations that make up Title 22 does not contain as many exemptions or exclusions as does 40 CFR 260. As with the California Health and Safety Code, Title 22 also regulates a wider range of waste types and waste management activities than the RCRA regulations in 40 CFR 260 do. To aid the regulated community, the State of California compiled the hazardous materials, waste, and toxics-related regulations contained in CCR Titles 3, 8, 13, 17, 19, 22, 23, 24, and 27 into one consolidated CCR Title 26, “Toxics.” However, the California hazardous waste regulations are still commonly referred to as Title 22.

*California Code of Regulations Title 8 and California Division of Occupational Safety and Health (Cal/OSHA)*

California standards for workers dealing with hazardous materials are contained in CCR Title 8 and include practices for all industries (General Industrial Safety Orders) and specific practices for construction and other industries. Worker health and safety protections in California are regulated by the California Department of Industrial Relations, which includes the Division of Occupational Safety and Health (Cal/OSHA), which acts to protect workers from safety hazards and provides consultant assistance to employers. Cal/OSHA enforcement units conduct on-site evaluations and issue notices of violation to enforce necessary improvements to health and safety practices.

Title 8 of the CCR specifically addresses laboratory environments in Article 107 of Group 16 regulations, Sections 5139-5155, *Control of Hazardous Substances*. Subsection 5154.1 discusses requirements for the ventilation of laboratory fumes, including hood design and operation, air volume movement, and exhaust stack design. In addition, circumstances under which air dilution or air cleaning is required (such as scrubbing or air incineration) and decontamination procedures are described.

*Government Code Section 65962.5*

The provisions of Government Code Section 65962.5 require DTSC, the State Water Board, the California Department of Health Services, and the California Department of Resources Recycling and Recovery (formerly the California Integrated Waste Management Board) to submit information pertaining to sites associated with solid waste disposal, hazardous waste disposal, leaking underground storage tank (LUST) sites, and/or hazardous materials releases to the Secretary of CalEPA.

*California Fire Code*

The California Fire Code is Part 9 of Title 24, CCR, also referred to as the California Building Standards Code. The California Fire Code incorporates the latest International Fire Code of the International Code Council with necessary California amendments. The purpose of the California Fire Code is to establish the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises; and to provide safety and assistance to firefighters and emergency responders during emergency operations.

California Fire Code Chapter 33 contains requirements for construction activities, including the development and implementation of a site safety plan establishing a fire prevention program. In addition, California Fire Code Chapter 35 contains specific requirements for welding and other hot work under Chapter 35. The requirements are intended to maintain the required levels of fire protection, limit fire ignition and spread, establish the appropriate operation of equipment, and promote prompt response to fire emergencies. Regulated features include fire protection systems, firefighter access, water supply, means of egress, hazardous materials storage and use, and temporary heating equipment and other ignition sources.

## Regional and Local Regulations and Policies

*San Francisco Bay Regional Water Quality Control Board Responsibilities*

The Porter-Cologne Water Quality Control Act established the State Water Board and divided the state into nine regional basins, each under the jurisdiction of a Regional Water Quality Control Board. The Regional Water Board (Region 2) regulates water quality in the Bay Area, including the project site. The Regional Water Board has the authority to require groundwater investigations when the quality of groundwater or surface waters of the state is threatened, and to require remediation actions, if necessary. The Regional Water Board has developed Environmental Screening Levels to help expedite the preparation of environmental risk assessments at sites where contaminated soil and groundwater have been identified. The Regional Water Board issued the Municipal Regional Stormwater NPDES Permit (MRP), Order R2-2022-0018, NPDES Permit No CAS612008, which addresses the potential discharge of hazardous materials in municipal stormwater from municipalities in the Bay Area (described in detail in *Section 4.9, Hydrology and Water Quality*, of this EIR).

*Bay Area Air Quality Management District (BAAQMD) Responsibilities*

The Bay Area Air Quality Management District (BAAQMD) has primary responsibility for control of air pollution from sources other than motor vehicles and consumer products (which are the responsibility of the EPA and CARB). The BAAQMD is responsible for preparing attainment plans for nonattainment criteria pollutants, controlling stationary air pollutant sources, and issuing permits for activities including asbestos demolition and renovation activities.

BAAQMD Regulation 11-2 requires that prior to commencement of any building demolition or renovation, the owner or operator must thoroughly survey the affected structure or portion thereof for the presence of asbestos-containing materials. The survey must be performed by a person who is certified by the Division of Occupational Safety and Health, and who has taken and passed an EPA-approved Building Inspector course and conforms to the procedures outlined in the course. The survey must include sampling and the reporting of results of laboratory analysis of the asbestos content of all suspected asbestos-containing materials. This survey must be made available, upon request by the Air Pollution Control Officer, prior to the commencement of any regulated asbestos-containing material removal or any demolition. If asbestos-containing materials are identified, their disturbance, removal, and management must be performed in accordance with BAAQMD Regulations under Rule 11-2 to ensure that asbestos would not be released into the environment.

*Mountain View Fire Department Responsibilities*

The Mountain View Fire Department's Hazardous Materials Program is responsible for permitting and inspecting all businesses within the city limits that store hazardous materials, have underground storage tanks, or treat hazardous waste. Any business within the city limits that stores hazardous materials or hazardous waste above the exempt amounts is required to obtain a hazardous materials storage permit (City of Mountain View, 2023a).

The Environmental Safety Section of the Mountain View Fire Department implements state-mandated water pollution control programs to minimize pollutant discharges into Mountain View creeks and the Bay. As of July 1, 2019, applicants proposing to completely demolish a building in the City of Mountain View must submit a PCBs Screening Assessment Applicant Package prior to obtaining a demolition permit. The PCBs Screening Assessment Applicant Package includes a "Project Applicability Form" to determine if the building is likely to have materials containing PCBs, and a "PCBs in Priority Building Materials Report" form used to provide required assessment information for applicable projects. Structures built or remodeled between January 1, 1950, and January 1, 1981, may contain caulks/sealants, thermal/fiberglass insulation, adhesive/mastic, rubber window seals/gaskets with PCBs that require abatement before demolition in accordance with state and federal laws. Implementation of the requirement to manage PCBs during demolition is required in the Regional Water Board-issued MRP (City of Mountain View, 2023b).

*Emergency Operations Plans*

The Santa Clara County Operational Area Hazard Mitigation Plan (Office of Emergency Services, County of Santa Clara and Santa Clara County Fire. 2017), adopted in 2017, has been developed to reduce risks from natural disasters in unincorporated areas and all incorporated cities in Santa Clara County. The events discussed in the plan include earthquakes, floods, severe weather, dam and levee failure, landslides, wildfire, and drought. The Hazard Mitigation Plan is comprised of Volume 1 (Operational-Area-Wide Elements) and Volume 2 (Planning Partner Annexes). The plan complies with federal and state hazard mitigation planning requirements to establish eligibility for funding under Federal Emergency Management Agency (FEMA) grant programs.

The City of Mountain View's Local Hazard Mitigation Plan was prepared in conjunction with the Santa Clara County Operational Area Hazard Mitigation Plan. It identifies the City's capabilities and vulnerabilities and prescribes hazard mitigation actions (Tetra Tech, 2017).

*City of Mountain View General Plan*

The City of Mountain View 2030 General Plan (City of Mountain View, 2012) includes the following policies related to hazards and hazardous materials:

Policy INC 18.1: *Contamination prevention.* Protect human and environmental health from environmental contamination.

Policy INC 18.2: *Contamination clean-up.* Cooperate with local, state and federal agencies that oversee environmental contamination and clean-up.

Policy PSA 3.2: *Protection from hazardous materials.* Prevent injuries and environmental contamination due to the uncontrolled release of hazardous materials through prevention and enforcement of fire and life safety codes.

Policy PSA 3.3: *Development review.* Carry out development review procedures that encourage effective identification and remediation of contamination and protection of public and environmental health and safety.

Policy PSA 3.4: *Oversight agencies.* Work with local, state and federal oversight agencies to encourage remediation of contamination and protection of public and environmental health and safety.

Policy PSA 3.5: *Peak water supply.* Ensure sufficient peak-load water supply to address fire and emergency response needs when approving new development.

Policy PSA 4.1: *Emergency response plan.* Maintain and update the City's emergency response plans.

*LASD Policies and Regulations*

LASD policies and regulations (LASD, 2023) that would apply to the project and were adopted for the purpose of avoiding or mitigating impacts related to hazardous materials are summarized as follows:[1]

Policy 3514: *Environmental Safety.* This policy aims to provide a safe and healthy environment at school facilities for students, staff, and community members. The Superintendent must regularly assess school facilities to identify environmental health risks and establish a comprehensive plan to prevent and/or mitigate environmental hazards based on a consideration of the proven effectiveness of various options, anticipated short-term and long-term costs and/or savings to the district, and the potential impact on staff attendance, student attendance, and student achievement. Strategies addressed in the district's plan must include, but not necessarily be limited to, the following:

1. Ensuring good indoor air quality by maintaining adequate ventilation; using effective maintenance operations to reduce dust, mold, mildew, and other indoor air contaminants; and considering air quality in the site selection, design, and furnishing of new or remodeled facilities.
2. Limiting outdoor activities when necessary due to poor outdoor air quality, including excessive smog, smoke, or ozone, or when ultraviolet radiation levels indicate a high risk of harm.
3. Reducing exposure to diesel exhaust and other air contaminants by limiting unnecessary idling of school buses and other commercial motor vehicles.
4. Minimizing exposure to lead in paint, soil, and drinking water.
5. Inspecting facilities for naturally occurring asbestos and asbestos-containing building materials that pose a health hazard due to damage or deterioration and safely removing, encapsulating, enclosing, or repairing such materials.
6. Ensuring the proper storage, use, and disposal of potentially hazardous substances.
7. Ensuring the use of effective least toxic pest management practices.

Regulation 3514: *Environmental Safety.* This regulation includes requirements related to providing proper ventilation to reduce indoor air contaminants; regularly inspecting for water damage, spills, leaks in plumbing and roofs, poor drainage,

[1] These policies have been summarized herein.

and improper ventilation so as to preclude the buildup of mold and mildew; sealing exterior wall and foundation cracks to minimize seepage of radon into buildings; using the least toxic pest management practices; limiting the painting of school facilities and maintenance or repair duties that require the use of potentially harmful substances to those times when school is not in session; storing paints, adhesives, and solvents in small quantities and in well-ventilated areas; placing printing and duplicating equipment that may generate indoor air pollutants, such as methyl alcohol or ammonia, in locations that are well ventilated and not frequented by students and staff; and not allowing the use of lead-based paint, lead plumbing and solders, or other potential sources of lead contamination in the construction of any new school facility.

Policy 3514.1: *Hazardous Substances.* This policy aims to provide a safe school environment that protects students and employees from exposure to potentially hazardous substances that may be used in the district's educational program and in the maintenance and operation of district facilities and equipment. Insofar as reasonably possible, the Superintendent or designee shall minimize the quantities of hazardous substances stored and used on school property. When hazardous substances must be used, the Superintendent or designee shall give preference to materials that cause the least risk to people and the environment. The Superintendent or designee shall ensure that all potentially hazardous substances on district properties are inventoried, used, stored, and regularly disposed of in a safe and legal manner. The Superintendent or designee shall develop, implement, and maintain a written hazard communication program in accordance with 8 CCR 5194 and shall ensure that employees, students, and others as necessary are fully informed about the properties and potential hazards of substances to which they may be exposed. The Superintendent or designee shall develop specific measures to ensure the safety of students and staff in school laboratories where hazardous chemicals are used. Such measures shall include the development and implementation of a chemical hygiene plan in accordance with 8 CCR 5191 and instruction to students about proper handling of hazardous substances.

Regulation 3514.1: *Hazardous Substances.* This regulation includes requirements related to the proper storage and disposal of hazardous materials including separating incompatible chemicals, use of appropriate containers, and storing chemicals in locations where people would not be exposed to vapors. This regulation also includes requirements for maintaining a Hazard Communication Program which addresses container labeling, safety data sheets, employee training, and providing information to contractors.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Significance Criteria

Implementation of the project would result in a significant impact related to hazards and hazardous materials if it would:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment;

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area;

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

The following significance criteria would not apply to the proposed project and are therefore excluded from further discussion in this impact analysis:

- *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.* The project site is not included on any of the lists of hazardous materials release sites compiled in accordance with Government Code Section 65962.5 (Cal/EPA, 2023), and therefore the project would have no impacts related to this topic.
- *For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area.* The project site is not located within a public airport land use plan area or within 2 miles of a public use airport (Windus, Walter B., 2008 and 2012). Therefore, the project would have no impacts related to this topic.
- *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.* The project site and surrounding areas are highly urbanized and not located near heavily vegetated areas or wildlands that could be susceptible to wildfire. The project site and surrounding areas are located in a Local Responsibility Area and not within or near a Very High Fire Hazard Severity Zone (CAL FIRE, 2008). Therefore, the project would have no impact related to wildland fire hazards.

## Less-than-Significant Impacts

*Routine Transportation, Use, or Disposal of Hazardous Materials*

*The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.*

Project Construction

During project construction, hazardous materials (e.g., fuel, oils, paints, and compressed gases) would be routinely transported and used at the project site. Because the project would result in soil disturbance greater than 1 acre, management of soil and hazardous materials during construction activities would be subject to the requirements of the Stormwater Construction General Permit (described in detail in *Section 4.9, Hydrology and Water Quality*, of this EIR), which requires preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that includes hazardous materials storage requirements. For example, construction site operators must store chemicals in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed). The management of hazardous materials during construction activities would also be subject to the requirements of Chapter 33 of the California Fire Code, which addresses the safe storage, use, and handling of flammable and combustible liquids and gases. The routine handling and use of hazardous materials by workers would be performed in accordance with OSHA regulations, which include training requirements for workers and a requirement that hazardous materials are accompanied by manufacturer's Safety Data Sheets. Cal/OSHA regulations include requirements for protective clothing, training, and limits on exposure to hazardous materials.

Construction of the project would result in the generation of various waste materials that would require recycling and/or disposal, including some waste materials that could be classified as hazardous waste. Hazardous materials would be transported by a licensed hazardous waste hauler and disposed of at facilities that are permitted to accept such materials as required by DOT, RCRA, and State of California regulations.

Project Operation

Operation of the project would involve the routine storage and use of small quantities of commercially available hazardous materials for routine maintenance (e.g., paint and cleaning supplies) and could also include the storage of chemicals for laboratory classes. The proper storage and use of small quantities of commercially available hazardous materials or laboratory chemicals would not pose a significant hazard to the public or environment. If storage of hazardous materials exceeding specific quantities would occur during project operation, the project would be required to comply with existing hazardous materials regulations including permitting of hazardous materials storage as required by the Hazardous Materials Program enforced by the Mountain View Fire Department. The routine storage, use, and disposal of hazardous materials on the project site would also be subject to the existing policies and regulations adopted by LASD including Policy and Regulation 3514: Environmental Safety, and Policy and Regulation 3514.1: Hazardous Substances, as described under *Regulatory Framework* above, which would ensure that students and employees at the project site would not be at risk of exposure to hazardous materials.

Conclusion

The routine transportation, use, and disposal of hazardous materials during construction and operation of the project may pose health and safety hazards to workers or site occupants if the hazardous materials are improperly handled, or to the nearby public and the environment if the hazardous materials would be accidentally released into the environment. Potential impacts associated with accidental releases of hazardous materials into the environment are discussed under *Accidental Release of Hazardous Materials,* below.

Compliance with the regulations described under *Regulatory Framework* above, including OSHA and Cal/OSHA regulations, the California Fire Code, the California Health and Safety Code Division 20, Chapter 6.5, CCR, DOT, RCRA, and other federal, state, regional, and local regulations, is mandatory. These regulations would ensure that the project would not create a significant hazard to the public or the environment associated with the routine transport, use, or disposal of hazardous materials by ensuring that these materials are properly handled during construction and operation of the project. Therefore, this impact would be less than significant.

*Accidental Release of Hazardous Materials*

*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.*

The public and/or the environment could be affected by the release of hazardous materials from the project site into the environment if (1) hazardous building materials (e.g., lead containing paint, PCBs, and asbestos) were disturbed and released into the environment during demolition of existing structures; (2) leakage, spills, or improper disposal of hazardous materials would occur during construction or operation of the project; or (3) the project would expose construction workers, the public, the environment, or future occupants of the project site to contaminated soil, groundwater, or soil gas during construction or operation of the project.

Hazardous Building Materials

As discussed under *Environmental Setting* above, asbestos-containing materials have been identified in one building at the project site, and there is the potential for other hazardous building materials to be present at the project site.

Disturbance of lead paint must be performed in accordance with applicable laws and regulations, including but not limited to Cal/OSHA's Construction Lead Standard, Title 8 CCR Section 1532.1, and Department of Health Services (DHS) regulation 17 CCR Sections 35001 through 36100, as may be amended.

To ensure that asbestos would not be released into the environment, the disturbance, removal, and management of asbestos-containing materials must be performed in accordance with Cal/OSHA regulations and BAAQMD Regulations under Rule 11-2 prior to the City issuing demolition permits.

Electrical and lighting equipment that may contain hazardous materials such as mercury and PCBs can be readily identified and, therefore, would be appropriately managed and disposed of in accordance with applicable regulations including TSCA, DTSC hazardous waste rules, and other federal and state regulations; however, PCBs-containing building materials such as caulks/sealants, rubber window seals/gaskets, specialized paints, mastics, and other adhesives cannot be readily identified and require testing to evaluate whether these materials contain PCBs.

The MRP requires that all Bay Area municipalities address potential sources of PCBs including preventing certain building materials that may contain PCBs from entering storm drains as a result of building demolition activities. In order to obtain demolition permits from the City, assessments must be performed at the project site to screen existing buildings for PCBs in priority building materials including caulks and sealants, thermal/fiberglass insulation and other insulating materials, adhesive/mastic, and rubber window seals/gaskets. The assessments must be performed in accordance with Bay Area Stormwater Agencies Association (BASMAA) protocols (City of Mountain View, 2019).

In accordance with the existing regulations described above, comprehensive hazardous building materials surveys and hazardous building materials abatement activities must be conducted prior to demolition of existing structures on the project site. Hazardous building materials removed prior to demolition activities must be transported in accordance with DOT regulations and disposed of in accordance with the RCRA, TSCA, CCR, and/or California Universal Waste Rule at a facility permitted to accept the wastes. Compliance with the existing regulations described above is mandatory and would ensure that potential impacts of the project related to the accidental release of hazardous building materials into the environment would be less than significant.

<u>Spills, Leaks, or Improper Disposal of Hazardous Materials</u>

An accidental release of hazardous materials (e.g., fuels, oils, paints, or compressed gases) during construction of the project could result in exposure of construction workers, the public, and/or the environment to hazardous materials. As discussed above, the project would be subject to the requirements of the Construction General Permit, which requires preparation and implementation of a SWPPP to reduce the risk of spills or leaks reaching the environment, including procedures to address minor spills of hazardous materials. Measures to control spills, leakage, and dumping must be addressed through structural as well as non-structural best management practices (BMPs). For example, equipment and materials for cleanup of spills must be available on site, and spills and leaks must be cleaned up immediately and disposed of properly. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, and drainage from raw material storage. The management of hazardous materials during construction activities would also be subject to the requirements of Chapter 33 of the California Fire Code, which reduces the potential for and risks of hazardous materials releases.

As discussed above, the storage, use, transportation, and disposal of hazardous materials is subject to both federal and state regulations. If a discharge or spill of hazardous materials occurs during transportation, the transporter is required to take appropriate immediate action to protect human health and the environment (e.g., notify local authorities and contain the spill), and is responsible for the discharge cleanup.

If significant quantities of hazardous materials would be stored at the project site during operation, compliance with the Hazardous Materials Program enforced by the Mountain View Fire Department would require that hazardous materials be properly labeled, stored, and disposed of; and would require training and planning to ensure appropriate responses to spills and emergencies. The routine storage, use, and disposal of hazardous materials on the project site would also be subject to the existing policies and regulations adopted by LASD including Policy and Regulation 3514: Environmental Safety, and Policy and Regulation 3514.1: Hazardous Substances, as described under *Regulatory Framework* above, which would ensure that students and employees at the project site would not be at risk of exposure to accidental releases of hazardous materials.

Compliance with existing regulations regarding the management, transportation, and disposal of hazardous materials, as discussed under *Regulatory Framework* and *Routine Transportation, Use, or Disposal of Hazardous Materials* above, would ensure that potential impacts related to spills, leaks, or improper disposal of hazardous materials during construction and operation would be less than significant.

<u>Subsurface Contamination</u>

As discussed under *Environmental Setting* above, NOA has been detected in shallow soil and VOCs were detected in soil gas samples at the project site. The Draft PEA Report indicated that risk management action to address soil gas exposures at the project site would not be warranted and recommended capping the project site with clean imported material and preparing an asbestos dust management plan to address the presence of NOA (Terraphase Engineering Inc., 2022). DTSC concurred with the recommendation for capping NOA-impacted soils and requested that additional vapor intrusion risk assessment be performed (DTSC, 2023).

The additional vapor intrusion risk assessment requested by DTSC has not been made available for review and has not been approved by DTSC; therefore, it is not clear whether vapor intrusion could potentially pose a health risk for future school occupants (students and school workers) at the project site. If DTSC determines that vapor intrusion could potentially pose a health risk for future school occupants, then DTSC would require a response action to address the potential vapor intrusion health risks in accordance with California Education Code Section 17213.2 as described under *Regulatory Framework* above.

As discussed above, a response action would be required for the project by DTSC to address NOA in soil and potentially VOCs in soil gas, depending on the additional vapor intrusion risk assessment. As required by California Education Code Section 17213.2, LASD would enter into an agreement with DTSC to oversee a response action at the project site, and DTSC would notify the State Department of Education, DSA, and the Office of Public School Construction to certify that all necessary response actions have been completed at the project site. DTSC would also notify DSA if the response action has an impact on the design of the project and must specify the conditions that must be met in the design to protect the integrity of the response action.

Proposed response actions including excavation and removal and/or capping of NOA at the project site and potential mitigation of vapor intrusion concerns (if required) would be described in a Removal Action Workplan (RAW). DTSC would ensure that the RAW would include all necessary actions and precautions with appropriate performance measures to ensure the safety of human health during implementation of the RAW, construction of the project, and operation of the project. These actions and precautions may include but are not necessarily limited to:

- Preparation and implementation of a site-specific health and safety plan during construction;

- Dust control and air monitoring procedures;
- Soil management and disposal procedures;
- Testing of imported clean soil;
- Protocols to address management of previously unidentified contamination that could be discovered during construction;
- Installation of engineering controls including capping of NOA-containing soil and potential installation of vapor intrusion mitigation systems (VIMS), which would likely include installation of vapor barriers and subs-slab ventilation systems beneath buildings, if necessary;
- Performance monitoring of VIMS (if installed) and/or indoor air sampling;
- Establishment of institutional controls (e.g., a land use covenant) to protect and maintain engineering controls and prevent uncontrolled disturbance of NOA-containing soil; and
- Long-term operation and maintenance of engineering controls to ensure that they remain protective of human health and the environment.

Implementation of a RAW for the project under DTSC oversight and as required by California Education Code Section 17213.2 would ensure that potential impacts related to the accidental release of hazardous materials due to subsurface contamination would be less than significant.

*Hazardous Emissions Near Schools*

*The project would not emit significant hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.*

With the exception of the proposed project, no existing or proposed schools have been identified within one-quarter mile of the project site (California Department of Education, 2023). As discussed above, the hazardous materials impacts of the project would be less than significant and, as discussed in *Section 4.2, Air Quality,* of this EIR, operation of the project would not generate hazardous emissions that could pose a health risk to future students and school workers on the project site. Therefore, the project would have less-than-significant impacts related to hazardous emissions within one-quarter mile of schools.

*Emergency Evacuation and Response*

*The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.*

As discussed under *Regulatory Framework* above, the City of Mountain View has developed a Local Hazard Mitigation Plan prepared in conjunction with the Santa Clara County Operational Area Hazard Mitigation Plan. The project would result in an incremental increase in the demand for emergency response resources and services; however, the project would not impair or interfere with implementation of the Local Hazard Mitigation Plan.

The project would not alter the existing roadways around the project site. The project could require temporary closure of traffic lanes during construction activities (e.g., for utility work). This could impede the implementation of emergency response and evacuation activities; however, any construction activities that would result in temporary roadway closures would require that LASD obtain traffic permits from the City and prepare a traffic control plan, which would maintain emergency response and evacuation access through appropriate traffic control measures and detours.

Based on the above considerations, adequate emergency access would be maintained at the project site, and potential impacts related to impairing or interfering with the emergency response or evacuation plans would be less than significant. (See also discussion of emergency access in *Section 4.14, Transportation,* of this EIR.)

## Potentially Significant Impacts

No potentially significant impacts related to hazards or hazardous materials would result from the project.

## Cumulative Impacts

This section evaluates cumulative impacts related to hazards and hazardous materials. This cumulative analysis examines the effects of the project in the relevant geographic area in combination with other current projects and probable future projects. Cumulative impacts are addressed only for those significance criteria for which the project would result in an impact, whether it be less than significant or less than significant with mitigation. If the project would result in no impact with respect to a particular criterion (e.g., hazardous emissions near other schools, hazardous materials release sites compiled in accordance with Government Code Section 65962.5, aviation hazards, and wildfire), it would not contribute to a cumulative impact and therefore no analysis is required.

Occurrence of a cumulative effect related to hazardous materials would require that multiple projects release hazardous materials near each other; therefore, the geographic area of concern for cumulative hazardous materials impacts is the project site and nearby areas. Cumulative impacts on emergency response and evacuation can occur when an increase in vehicle traffic occurs in an area with limited vehicular access; therefore, the geographic area of concern for cumulative emergency response and evacuation impacts is the roadway network surrounding the project site.

*Routine Transport, Use, or Disposal of Hazardous Materials.*

Hazardous materials (e.g., fuel, oils, paints, and compressed gases) would be routinely transported, stored, and used at the project site and at the sites of other projects in the area during construction activities, and operation of the project and other projects in the area could also involve the routine storage, use, and disposal of hazardous materials. By ensuring that these materials are properly handled during construction and operation, required compliance with existing hazardous materials regulations including OSHA and Cal/OSHA regulations, the California Fire Code, the California Health and Safety Code Division 20, Chapter 6.5, CCR, DOT, RCRA, and other federal, state, regional, and local regulations would ensure that the project and other projects in the area would not create a significant hazard to the public or the environment associated with the routine transport, use, or disposal of hazardous materials. Therefore, the project would not contribute to a cumulatively considerable impact related to the routine transport, use, or disposal of hazardous materials.

*Accidental Releases of Hazardous Materials*

Other projects in the area may include demolition of buildings that contain hazardous building materials. As discussed under *Environmental Setting* above, asbestos-containing materials have been identified at the project site and other hazardous building materials may be present on the project site. Compliance with existing regulations discussed under *Accidental Release of Hazardous Materials* above would ensure that potential impacts of the project and other projects in the area related to the accidental release of hazardous building materials into the environment would be less than significant. Therefore, the project would not contribute to a cumulatively considerable impact related to the accidental release of hazardous building materials into the environment.

Compliance with existing regulations regarding the management, transportation, and disposal of hazardous materials would ensure that potential impacts related to spills, leaks, or improper disposal of hazardous materials that would be handled during construction and operation of the project and other projects in the area would be less than significant. Therefore, the project would not contribute to a cumulatively considerable impact related to spills, leaks, or improper disposal of hazardous materials.

Other projects in the area may involve redevelopment in areas of subsurface contamination. Review of the State Water Board's GeoTracker database indicates that there are hazardous materials release sites at three of the cumulative project sites, including closed leaking underground storage tank sites at Cumulative Projects 1 and 2 (see Table 6-1 and Figure 6-1 in *Chapter 6, Other CEQA Considerations*, for the descriptions and locations of cumulative projects), and an active voluntary cleanup site located at Cumulative Project 4 that is currently being overseen by DTSC (State Water Board, 2023). As discussed under *Environmental Setting* above, NOA has been detected in shallow soil and VOCs were detected in soil gas samples at the project site, which includes the future City park (Cumulative Project 7). Redevelopment of multiple projects in areas of subsurface contamination could result in cumulative exposure of construction workers, the public, and the environment to hazardous materials. Implementation of General Plan policies (including Policies INC 18.1, INC 18.2, PSA 3.3 and PSA 3.4, as described under *Regulatory Framework* above) for cumulative projects would ensure that the City and regulatory agencies would regulate development at the cumulative projects with subsurface contamination and require appropriate remediation to ensure that construction workers, the public, future occupants, and the environment are adequately protected from hazards associated with subsurface contamination. Implementation of remediation activities on the project site would be performed in accordance with a RAW under DTSC oversight, as discussed under *Accidental Release of Hazardous Materials* above, which would ensure that potential impacts of the project associated with accidental releases of hazardous materials due to subsurface contamination would not be cumulatively considerable.

*Emergency Response and Evacuation*

The project and other projects in the area would result in an incremental increase in the demand for emergency response resources and services; however, the project would not impair or interfere with implementation of the City's Local Hazard Mitigation Plan. Implementation of General Plan

Policy PSA 4.1, as described under *Regulatory Framework* above, would ensure that the City would maintain an effective emergency response plan that accounts for development of the project and other projects in the area.

The project and other projects in the area could require temporary closure of traffic lanes during construction activities (e.g., for utility work). This could impede the implementation of emergency response and evacuation activities; however, any construction activities that would result in temporary roadway closures would require that applicants obtain traffic permits from the City and prepare a traffic control plan, which would maintain emergency response and evacuation access through appropriate traffic control measures and detours.

Based on the above considerations, adequate emergency access would be maintained and potential impacts of the project related to impairing or interfering with the emergency response or evacuation plans would not be cumulatively considerable.

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# 4.9 HYDROLOGY AND WATER QUALITY

## INTRODUCTION

This section of the Draft Environmental Impact Report (EIR) provides an overview of hydrology and water quality at and near the project site and assesses potential impacts related to hydrology and water quality that could result from implementation of the proposed project.

## ENVIRONMENTAL SETTING

### Surface Water

*Watershed Hydrology*

The project site is located within the Adobe Creek subwatershed, which covers an area of approximately 10 square miles in northwestern Santa Clara County. Adobe Creek originates on the northeastern-facing slopes of the Santa Cruz Mountains and flows northerly over steep forested terrain until it meets the Middle, West, and North Adobe Forks. The drainage area above the confluence of the Adobe Forks is undeveloped open space. The remainder of the watershed primarily consists of residential development. Along the valley floor, Adobe Creek flows through Los Altos Hills, Los Altos, Palo Alto, and Mountain View. Adobe Creek is joined by Barron Creek west of Highway 101 and continues to flow through an estuarine area with tidal influence until it drains into the Palo Alto Flood Basin and then the Lower South San Francisco Bay (Santa Clara Valley Urban Runoff Pollution Prevention Program [SCVURPPP], 2019).

*Local Drainage*

The project site is currently covered by approximately 10.97 acres of impervious surfaces (pavement and buildings) and 0.77 acre of pervious landscaping. Of these totals, the approximately 9.5-acre proposed school portion of the project site includes approximately 8.8 acres of impervious surfaces and 0.7 acre of pervious surfaces (see Table 3-1 in *Chapter 3, Project Description,* of this EIR). Stormwater runoff from the project site is captured in catch basins and conveyed through underground storm drains into the City of Mountain View's storm drain systems located beneath California Street. Stormwater runoff from some areas to the south of the project site also flows onto the project site as surface flow (BGT Land Surveying, 2023). The City of Mountain View's storm drain system beneath California Street discharges into a storm drain beneath San Antonio Road, which discharges into a storm drain beneath Alma Street, which then discharges into the concrete-lined engineered channel of Adobe Creek approximately 3,500 feet northwest of the project site (Oakland Museum of California, 2005).

*Surface Water Quality*

The quality of surface water and groundwater in the vicinity of the project site is affected by past and current land uses, and by the composition of geologic materials in the area. The State Water Resources Control Board (State Water Board) and nine regional water quality control boards regulate the quality of surface water and groundwater bodies throughout California. The project site is located within the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (Regional Water Board or RWQCB), which is responsible for implementing the San Francisco Bay Basin (Region 2) Water Quality Control Plan, also known as the Basin Plan (Regional Water Board, 2023). The Basin Plan establishes beneficial water uses for waterways, water bodies, and groundwater within the region and is a master policy document for managing water quality in the region.

Adobe Creek is listed in the Basin Plan as providing the beneficial uses of warm and cold freshwater habitats, wildlife habitat, and water contact and noncontact recreation. South San Francisco Bay is listed in the Basin Plan as providing the beneficial uses of industrial service supply, commercial and sport fishing, shellfish harvesting, estuarine habitat, fish migration, preservation of rare and endangered species, fish spawning, wildlife habitat, water contact and noncontact recreation, and navigation (Regional Water Board, 2023).

Under Section 303 (d) of the Clean Water Act (described under *Regulatory Framework* below), states must present the U.S. Environmental Protection Agency (EPA) with a list of "impaired water bodies," defined as those water bodies that do not meet water quality standards, which in some cases results in the development of a total maximum daily load (TMDL). On a broad level, the TMDL process leads to a "pollution budget" designed to restore the health of a polluted body of water. The TMDL process provides a quantitative assessment of the sources of pollution contributing to a violation of the water quality standards and identifies the pollutant load reductions or control actions needed to restore and protect the beneficial uses of the impaired waterbody.

The Regional Water Board's Section 303 (d) list identifies South San Francisco Bay as impaired for several pollutants including pesticides (chlordane, DDT, and dieldrin), dioxins, furans, invasive species, mercury, and polychlorinated biphenyls (PCBs). TMDLs have been established for mercury and PCBs and will ultimately be prepared for other pollutants affecting the Bay (State Water Board, 2018).

## Groundwater

### *Hydrogeology*

The project site is located within the Santa Clara Subbasin of the Santa Clara Valley Groundwater Basin. The Santa Clara Subbasin covers a surface area of 297 square miles and forms a northwest-trending, elongated valley bounded by the Santa Cruz Mountains to the west and the Diablo Range to the east. The Santa Clara Subbasin is a trough-like depression filled with Quaternary alluvium deposits of unconsolidated gravel, sand, silt, and clay that eroded from adjacent mountain ranges by flowing water and were deposited into the valley. Due to different hydrogeologic, land use, and water supply management characteristics, the Santa Clara Subbasin is further divided into two groundwater management areas: the Santa Clara Plain (which includes the majority of the Santa Clara Subbasin including the City of Mountain View and surrounding areas, covering 280 square miles) and the much smaller Coyote Valley (located at the southeast of San Jose and covering 17 square miles). Groundwater within the Santa Clara Subbasin is generally found within aquifers consisting of high permeability sand and gravel layers interbedded between low-permeability clay and silt layers. The low-permeability layers confine the aquifers and limit the migration of groundwater between aquifers. Recharge within the Santa Clara Subbasin generally occurs along the margins and southern portion of the subbasin where coarse-grained sediments predominate. The recharge area includes the alluvial fan and fluvial deposits along the edge of the subbasin where high lateral and vertical permeability allow surface water to infiltrate the aquifers. The percolation of surface water in recharge areas replenishes unconfined groundwater within the recharge area and contributes to the recharge of principal aquifers in the confined area through subsurface flow. The project site is located within the confined area in the northwest portion of the Santa Clara Subbasin (Santa Clara Valley Water District [Valley Water], 2021). Shallow groundwater has been measured at depths of approximately 15 to 20 feet below ground surface at the project site (Terraphase Engineering Inc., 2022). Shallow groundwater levels may fluctuate depending on seasonal rainfall conditions.

The thickness of aquifer materials in the Santa Clara Plain ranges from about 150 feet near the Coyote Narrows to more than 1,500 feet in the interior of the subbasin. The alluvium thins toward the western and eastern edges of the Santa Clara Plain. The central portion of the Santa Clara Plain contains a laterally extensive, low permeability aquitard that restricts the vertical flow of groundwater. This major aquitard varies in thickness from 20 to 100 feet and typically occurs at depths between 100 to 200 feet below ground surface, separating shallow and principal aquifer zones. Shallow aquifer zones generally refer to aquifers that occur within 150 feet of the ground surface, while principal aquifer zones generally occur at depths below 150 feet. Generally, the shallow aquifer is not used for water supply. The primary confined aquifers exist at depths between 200 and 1,000 feet (Valley Water, 2021).

Historical groundwater pumping in the Santa Clara Valley resulted in a decline of groundwater levels by as much as 200 feet. Fluid pressure in the aquifers was reduced, resulting in the compression of fine-grained materials (e.g., clays) and a broad sagging of the land surface. Approximately 2 feet of inelastic (permanent) subsidence was observed in the area of the project site between 1934 and 1967. Significant inelastic subsidence in the Santa Clara Valley was essentially halted by around 1970 through Valley Water's expanded conjunctive management programs, which allowed groundwater levels to recover substantially. Some amount of elastic (temporary) subsidence occurs annually in response to seasonal pumping in the Subbasin (Valley Water, 2021).

*Groundwater Quality*

The Santa Clara Subbasin is listed in the Basin Plan as providing beneficial uses of groundwater including municipal, process, industrial, and agricultural supply (Regional Water Board, 2023). Groundwater in the Santa Clara Plain is typically of very good quality, with infrequent detections of water-quality parameters above California's health-based Maximum Contaminant Levels for drinking water. Shallow groundwater samples were collected from two locations at the project site in 2021 for analysis of volatile organic compounds (VOCs), and VOCs were not detected in the groundwater samples (Terraphase Engineering Inc., 2022).

## Flooding

The project site is mapped by the Federal Emergency Management Agency (FEMA) as being in Zone X, areas with reduced flood risk due to levees (FEMA, 2009 and 2023).

# REGULATORY FRAMEWORK

## Federal and State Regulations

*Clean Water Act*

The Federal Clean Water Act of 1972 is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. It is administered by the EPA. The Clean Water Act operates on the principle that all discharges into the nation's waters are unlawful unless specifically authorized by a permit. The EPA has delegated its authority to implement and enforce most of the applicable water quality provisions of this law to the individual states. In California, the provisions are enforced by nine regional water boards under the auspices of the State Water Board.

*National Pollutant Discharge Elimination System Permit Program*

Under Section 402 of the Clean Water Act, the discharge of pollutants through a point source into waters of the United States is prohibited unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The NPDES program regulates the discharge of pollutants from municipal and industrial wastewater treatment plants and sewer collection systems, as well as stormwater discharges from industrial facilities, municipalities, and construction sites. In California, implementation and enforcement of the NPDES program is conducted through the State Water Board and the nine regional water boards. The regional water boards set standard conditions for each permittee in their region, which includes effluent limitations and monitoring programs.

*National Flood Insurance Program*

In 1968, Congress created the National Flood Insurance Program (NFIP) in response to the rising cost of taxpayer-funded disaster relief for flood victims and the increasing amount of damage caused by floods. The NFIP makes federally backed flood insurance available for communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage. FEMA manages the NFIP and creates Flood Insurance Rate Maps (FIRMs) that designate 100-year flood hazard zones and delineate other flood hazard areas. The NFIP is intended to encourage state and local governments to adopt responsible floodplain management programs and flood measures.

*Porter-Cologne Water Quality Control Act*

The Porter-Cologne Water Quality Control Act (California Water Code, Division 7, Water Quality) was promulgated in 1969. It established the State Water Board and divided California into nine hydrologic regions, each overseen by a regional water board. The State Water Board is the primary state agency responsible for protecting the quality of California's surface and groundwater supplies, but much of its daily implementation authority is delegated to the nine regional water boards. The Porter-Cologne Act also provides for the development and tri-annual review of Water Quality Control Plans that designate beneficial uses of California's major rivers and groundwater basins and establish narrative and numerical water quality objectives for those waters. The project site is within the jurisdiction of the Regional Water Board, which enforces compliance with water quality objectives for beneficial uses of surface waters.

*NPDES Construction General Permit*

Construction projects disturbing more than 1 acre of land are required to comply with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (State Water Board, 2022).

To obtain coverage under the Construction General Permit, the project applicant must provide, via electronic submittal, a Notice of Intent, a Storm Water Pollution Prevention Plan (SWPPP), and other documents required by Attachment B of the Construction General Permit. Activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as grubbing or excavation. The permit also covers linear underground and overhead projects, such as pipeline installations. Construction General Permit activities are regulated at a local level by the Regional Water Board.

The Construction General Permit uses a risk-based permitting approach and mandates certain requirements based on the project risk level (i.e., Level 1, Level 2, or Level 3). The project risk level is based on the risk of sediment discharge and the receiving water risk. The sediment discharge risk depends on the project location and timing (i.e., wet season versus dry season activities). The receiving water risk depends on whether the project would discharge to a sediment-sensitive receiving water. The determination of the project risk level would be made by the project applicant when the Notice of Intent is filed (and more details of the timing of the construction activity are known).

The performance standard in the Construction General Permit is that dischargers shall minimize or prevent pollutants in stormwater discharges and authorized non-stormwater discharges through the use of controls, structures, and best management practices (BMPs) that achieve Best Available Technology for treatment of toxic and non-conventional pollutants and Best Conventional Technology for treatment of conventional pollutants. A SWPPP must be prepared by a Qualified SWPPP Developer that meets the certification requirements in the Construction General Permit. The purpose of the SWPPP is (1) to identify the sources of sediment and other pollutants that could affect the quality of stormwater discharges, and (2) to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges resulting from construction activity. Operation of BMPs must be overseen by a Qualified SWPPP Practitioner that meets the requirements outlined in the permit.

The SWPPP must also include a construction site monitoring program. Depending on the project risk level, the monitoring program may include visual observations of site discharges, water quality monitoring of site discharges (pH, turbidity, and non-visible pollutants, if applicable), and receiving water monitoring (pH, turbidity, suspended sediment concentration, and bioassessment).

The Construction General Permit allows non-stormwater discharge of groundwater dewatering effluent if the water is properly filtered and treated to remove sediment and pollutants using appropriate technologies such filtration, settling, coagulant application with no residual coagulant discharge, minor odor or color removal with activated carbon, small-scale peroxide addition, or other minor treatment. Testing of receiving waters would also be required prior to and during the discharge. The discharge of dewatering effluent is authorized under the Construction General Permit if the following conditions are met:

- The discharge does not cause or contribute to a violation of any water quality standard.
- The discharge does not violate any other provision of the Construction General Permit.
- The discharge is not prohibited by the applicable Basin Plan.
- The discharger has included and implemented specific BMPs required by the Construction General Permit to prevent or reduce the contact of the non-stormwater discharge with construction materials or equipment.
- The discharge does not contain toxic constituents in toxic amounts or (other) significant quantities of pollutants.
- The discharge is monitored and meets the applicable numeric action levels.
- The discharger reports the sampling information in the annual report.

If any of the above conditions are not satisfied, the discharge of dewatering effluent is not authorized by the Construction General Permit. If the dewatering activity is deemed by the Regional Water Board not to be covered by the Construction General Permit or other NPDES permit, and discharge of groundwater to the storm drain system is planned, then the discharger would be required to prepare a Report of Waste Discharge, and if approved by the Regional Water Board, be issued site-specific Waste Discharge Requirements (WDRs) under NPDES regulations.

*Sustainable Groundwater Management Act*

The Sustainable Groundwater Management Act requires local agencies to form groundwater sustainability agencies (GSAs) for high and medium priority basins and develop and implement groundwater sustainability plans to avoid undesirable results, mitigate overdraft, and reach sustainability within 20 years of implementing their sustainability plans. The California Department of Water Resources (DWR) is charged with classifying groundwater basins in California as either high, medium, low, or very low priority. The Santa Clara Subbasin is classified by DWR as a high priority basin that is not critically overdrafted. Valley Water is the GSA for the Santa Clara Subbasin and oversees the preparation and implementation of the Groundwater Management Plan (GMP) for the Santa Clara and Llagas Subbasins (Valley Water, 2021).

## Regional and Local Regulations and Policies

*Valley Water GMP*

Valley Water is an independent special district that provides wholesale water supply, groundwater management, flood protection, and stream stewardship for its service area, which includes all of Santa Clara County. Valley Water manages the groundwater underlying the Santa Clara and Llagas Subbasins. In November 2021, Valley Water adopted the current GMP for the Santa Clara and Llagas Subbasins. The goals of the GMP are to optimize the water supply reliability, minimize additional land subsidence, and protect the groundwater supply from potential contamination and sea water intrusion. Annual groundwater pumping far exceeds what is replenished naturally, so Valley Water ensures water supply reliability with its managed recharge program. Valley Water replenishes groundwater with imported water and surface runoff captured in 10 local reservoirs.

Recharge facilities include more than 300 acres of recharge ponds and over 90 miles of creeks. Valley Water coordinates with land use agencies to review certain EIRs, land use proposals (e.g., general plans), and Water Supply Assessments (WSAs) to ensure alignment with Valley Water's policies, water supply goals, and planning assumptions (Valley Water, 2021).

*San Francisco Bay Municipal Regional Stormwater Permit*

Pursuant to Section 402 of the Clean Water Act and the Porter-Cologne Water Quality Control Act, municipal stormwater discharges in the City of Mountain View are regulated under the Regional Water Board's Municipal Regional Stormwater NPDES Permit, Order No. R2-2022-0018, NPDES Permit No. CAS612008 (MRP) (Regional Water Board, 2022). The MRP is overseen by the Regional Water Board, and local municipalities (the permittees) are responsible for ensuring compliance with the MRP.

Provision C.3 of the MRP addresses post-construction stormwater management requirements for regulated projects, which are new development and redevelopment projects that create or replace 5,000 square feet or more of impervious surface. Where a redevelopment project results in an alteration of more than 50 percent of the impervious surface of a previously existing development that was not subject to Provision C.3, the entire project, consisting of all existing, new, and/or replaced impervious surfaces, must be included in the treatment system design (i.e., stormwater treatment systems must be designed and sized to treat stormwater runoff from the entire redevelopment project). Provision C.3 requires regulated projects to implement Low Impact Development (LID) source control, site design, and stormwater treatment. LID employs principles such as preserving and recreating natural landscape features and minimizing impervious surfaces to create functional and appealing site drainage that treats stormwater as a resource, rather than a waste product. Practices used to adhere to these LID principles include measures such as rain barrels and cisterns, green roofs, permeable pavement, preservation of undeveloped open space, and biotreatment through rain gardens, bioretention areas, bioswales, and planter/tree boxes.

Provision C.3.g of the MRP pertains to hydromodification management, which requires regulated projects that create or replace 1 acre or more of impervious surface and increase impervious surface compared to the pre-project conditions to ensure that stormwater discharges from the project do not cause an increase in the erosion potential of the receiving stream over the existing condition. Regulated projects that are located in catchments or subwatersheds that are highly developed (70 percent impervious) or that drain to hardened channels, enclosed pipes, or tidally influenced channels are exempt from hydromodification requirements.

*Santa Clara Valley Urban Runoff Pollution Prevention Program*

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) is an association of 13 cities and towns in the Santa Clara Valley, together with the County of Santa Clara and Valley Water, that are regulated under the MRP to discharge stormwater to South San Francisco Bay. The SCVURPPP assists its members with maintaining compliance with the MRP and promotes stormwater pollution prevention within that context. Participating agencies (including the City of Mountain View) must meet the provisions of the MRP by ensuring that new development and redevelopment mitigate water quality impacts on stormwater runoff during both the construction and operation of projects (SCVURPPP, 2019).

The SCVURPPP has also developed a C.3 Stormwater Handbook (SCVURPPP, 2016) that assists its members with compliance with Provision C.3 of the MRP by helping developers, builders, and project applicants include appropriate post-construction stormwater controls in their projects to meet local municipal requirements and requirements of the MRP.

*Mountain View Municipal Code*

Section 35.32.3 of the Mountain View Municipal Code makes it unlawful to discharge or cause a threatened discharge to any curbside gutter, storm sewer, storm drain gutter, creek or natural outlet any domestic sewage, sanitary sewage, industrial wastes, polluted waters, construction waste, litter, or refuse except where permission is granted by the fire chief. All water approved for discharge into any curbside gutter, storm sewer, storm drain or natural outlet may be regulated in accordance with the requirements of this chapter pertaining to discharges to the sanitary sewer and subject to additional or modified water quality and quantity standards, at the discretion of the fire chief. Water for which the storm sewer collection system was designed and constructed is limited to stormwater, water from vehicle rinsing, dechlorinated drinking (potable) water, dechlorinated water main flushing water, firefighting water, construction dewatering, and certain other types of treated wastewater. Construction dewatering must contain no organic solvents and be filtered prior to entry into a catch basin. The fire chief must review the characteristics of the wastewater proposed to be discharged as well as the method and efficiency of the proposed treatment system to determine consistency with acceptable BMPs prior to approving or disapproving the discharge to the storm sewer collection system. This section of the Municipal Code does not prohibit any discharge in compliance with an NPDES permit issued to the discharger. Unlawful discharges to the storm drain system, including, but not limited to, spills, sanitary sewer overflows, illicit connections, and illegal dumping incidents, must be immediately reported to the fire chief by the discharger or responsible party. The discharger or responsible party must also take immediate corrective actions, which include efforts to stop, contain and clean up the discharge.

Section 35.34 of the Municipal Code requires permanent stormwater pollution prevention measures for development and redevelopment projects in order to reduce water quality impacts of stormwater runoff from the site for the life of the project in accordance with the requirements of this chapter of the Municipal Code, the City of Mountain View's NPDES stormwater discharge permit, and City of Mountain View guidelines. Applicable development projects must submit a stormwater management plan in accordance with the City of Mountain View guidelines. Property owner(s) are responsible for ensuring that permanent stormwater pollution prevention measures are inspected to ensure they are working properly, at least twice a year, unless otherwise directed by the City of Mountain View. The City of Mountain View must have access to all on-site permanent stormwater pollution prevention measures for the purpose of inspection and repair.

*Mountain View General Plan*

The City of Mountain View 2030 General Plan (City of Mountain View, 2012) includes the following policies related to hydrology and water quality:

Policy INC 8.1: *Citywide stormwater system.* Maintain the stormwater system in good condition.

Policy INC 8.2: *National Pollutant Discharge Elimination System Permit.* Comply with requirements in the Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit (MRP).

Policy INC 8.3: *Cost-effective strategies.* Encourage stormwater strategies that minimize additional City administrative and maintenance costs.

Policy INC 8.4: *Runoff pollution prevention.* Reduce the amount of stormwater runoff and stormwater pollution entering creeks, water channels and the San Francisco Bay through participation in the Santa Clara Valley Urban Runoff Pollution Prevention Program.

Policy INC 8.5: *Site-specific stormwater treatment.* Require post-construction stormwater treatment controls consistent with MRP requirements for both new development and redevelopment projects.

Policy INC 8.6: *Green streets.* Seek opportunities to develop green streets and sustainable streetscapes that minimize stormwater runoff, using techniques such as on-street bio-swales, bio-retention, permeable pavement or other innovative approaches.

Policy INC 8.7: *Stormwater quality.* Improve the water quality of stormwater and reduce flow quantities.

Policy INC 17.1: *Flood prevention.* Provide and maintain City infrastructure to reduce localized flooding and protect community health and safety.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Significance Criteria

Implementation of the project would result in a significant impact related to hydrology and water quality if it would:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;

c) 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:

   i. result in substantial erosion or siltation/n on- or off-site;

   ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

iii. 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

iv. impede or redirect flood flows;

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

## Less-than-Significant Impacts

*Groundwater Supplies*

*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.*

Dewatering is not anticipated to be required during construction of the project; however, if dewatering is necessary, it would be temporary, limited to shallow groundwater, and localized in the areas of excavations. Therefore, construction dewatering would not result in significant impacts related to depletion of groundwater supplies.

As discussed under *Environmental Setting* above, the project site is currently covered by approximately 10.97 acres of impervious surfaces (pavement and buildings) and 0.77 acre of pervious landscaping. Of these totals, the approximately 9.5-acre proposed school portion of the project site includes approximately 8.8 acres of impervious surfaces and 0.7 acre of pervious surfaces (see Table 3-1 in *Chapter 3, Project Description,* of this EIR). The approximately 2.2-acre future park portion of the project site includes approximately 2.17 acres of impervious surfaces and 0.05 acre of pervious surfaces. The project would include removal of most of the existing impervious surfaces on the park site and covering of the ground surface with a layer of permeable aggregate base material as a temporary ground cover until the City of Mountain View designs and constructs the park in the future. Although the aggregate base material would be only a temporary ground surface, it would reduce stormwater runoff from the future park portion of the project site and increase infiltration of rainwater compared to the existing condition. The project would create approximately 8.3 acres of impervious surfaces (including pavement, roofs, and the synthetic turf field) and 1.2 acres of pervious landscaping on the school portion of the project site, which would increase pervious surfaces on the school parcel by approximately 0.5 acre compared to the existing condition. The project would also include LID stormwater treatment measures such as bioretention planters that would allow for infiltration of runoff from impervious surfaces. Therefore, the project would increase infiltration of stormwater compared to the existing condition and create a beneficial effect related to groundwater recharge.

The project's water use would not decrease groundwater resources. Approximately 87 percent of the City of Mountain View's drinking water supply comes from the San Francisco Public Utilities Commission (SFPUC), and the project site is located in an area that receives water supply from the SFPUC. Most of the SFPUC's water originates from the Tuolumne River, which is fed by Sierra Nevada snowmelt and fills Hetch Hetchy Reservoir. A smaller portion of the SFPUC's water is captured as runoff in local Bay Area reservoirs (City of Mountain View, 2023). Because the water supply for the project site comes from surface water sources, any potential increase in water use from the project would not decrease groundwater resources. As discussed in *Section 4.16, Utilities and Service Systems,* of this EIR, the project is expected to produce a net decrease in water demand, compared to the existing condition (commercial buildings).

Based on the analysis above, the project would result in less-than-significant impacts related to decreasing groundwater resources, interfering with groundwater recharge, and impeding sustainable management of the groundwater basin.

*Release of Pollutants due to Inundation*

*The project would not risk release of pollutants due to project inundation.*

As discussed under *Flooding* above, the project site is mapped by FEMA as being in Zone X, areas with reduced flood risk due to levees. The project site is not located in a 100-year flood hazard zone mapped by FEMA (FEMA, 2009 and 2023), and therefore the project would result in less-than-significant impacts related to the release of pollutants due to flooding.

A tsunami is a sea wave caused by a submarine earthquake, landslide, or volcanic eruption. Tsunamis can cause catastrophic damage to shallow or exposed shorelines. The project site is not located within a Tsunami Hazard Area (California Geologic Survey, 2021). Therefore, potential impacts related to the release of pollutants in the event of a tsunami would be less than significant.

Seiches are waves that are created in an enclosed body of water such as a bay, lake, or harbor and go up and down or oscillate and do not progress forward like standard ocean waves. Seiches are also referred to as standing waves and are triggered by strong winds, changes in atmospheric pressure, earthquakes, tsunamis or tidal influence. The height and frequency of seiches are determined by the strength of the triggering factor(s) and the size of the basin. Triggering forces that set off a seiche are most effective if they operate at specific frequencies relative to the size of an enclosed basin. Seiches are not considered a hazard in San Francisco Bay based on the basin geometry and dimensions of San Francisco Bay (Borrero et. al, 2006), and there are no other bodies of water near the project site that could pose a risk of generating seiches that could affect the project site. Therefore, potential impacts related to the release of pollutants in the event of a seiche would be less than significant.

## Potentially Significant Impacts

*Water Quality*

<u>Project Construction</u>

The project would involve construction activities including excavation and grading, which can increase the potential for erosion and sedimentation from stormwater runoff and for the leaching/transport of potential contaminants from disturbed soil. Construction activities would also involve the use of construction materials, equipment, and hazardous materials that can be sources of stormwater and groundwater pollution. If stormwater contacts disturbed soil and/or improperly stored hazardous materials, sediments and contaminants could be entrained in stormwater runoff that could reach waterways and degrade water quality, potentially resulting in a violation of water quality standards.

The project would disturb more than 1 acre of land, and therefore would be required to comply with the requirements of the Construction General Permit. In accordance with the Construction General Permit requirements, a SWPPP would be developed and implemented to identify all potential pollutants and their sources, including a list of site-specific BMPs to reduce discharges of construction-related stormwater pollutants. The SWPPP would include a detailed description of controls to reduce pollutants and outline maintenance and inspection procedures. The SWPPP would be required to be kept on-site and be made available to Regional Water Board inspectors. Typical sediment and erosion BMPs include protecting storm drain inlets and establishing and maintaining construction exits and perimeter controls. The SWPPP would also define proper building material staging areas, paint and concrete washout areas, proper equipment/vehicle fueling and maintenance practices, controls for equipment/vehicle washing, and allowable non-stormwater discharges. It would also include a spill prevention and response plan. Compliance with the Construction General Permit would ensure that stormwater runoff from the project site during construction would not result in erosion or siltation or create other sources of polluted runoff that could degrade groundwater or receiving water quality.

Shallow groundwater has been measured at depths of approximately 15 to 20 feet below ground surface at the project site, and therefore groundwater dewatering is not anticipated to be required during construction; however, groundwater levels can fluctuate, and more shallow or perched groundwater could potentially be present due to rain. Therefore, some limited groundwater dewatering could potentially be required during construction of the project. If groundwater dewatering is required, the dewatering effluent could have high turbidity (suspended sediment) and could contain other contaminants. Turbid or contaminated groundwater could cause degradation of the receiving water quality if discharged directly to storm drains without treatment. Any groundwater dewatering discharge would be subject to permits from the City of Palo Alto (which owns and operates the Regional Water Quality Control Plant) or the Regional Water Board, depending on whether the discharge would be to the sanitary sewer or storm drain system, respectively.

Under existing state law, it is illegal to allow unpermitted non-stormwater discharges to receiving waters. Section 35.32.3 of the Mountain View Municipal Code allows for the discharge of groundwater from construction dewatering to the City of Mountain View's storm drain systems if the discharge contains no organic solvents and is filtered prior to entry into a catch basin. The City of Mountain View fire chief must review the characteristics of the wastewater proposed to be discharged as well as the method and efficiency of the proposed treatment system to determine consistency with acceptable BMPs prior to approving or disapproving the discharge to the storm drain system.

As stated in the Construction General Permit, non-storm water discharges directly to receiving waters or the storm drain system have the potential to negatively affect water quality. The discharger must implement measures to control all non-stormwater discharges during construction, and from dewatering activities associated with construction. Discharging any pollutant-laden water from a dewatering site or sediment basin into any receiving water or storm drain that would cause or contribute to an exceedance of water quality objectives is prohibited (i.e., illegal).

The Construction General Permit allows the discharge of non-contaminated dewatering effluent if the water is properly filtered or treated, using appropriate technology. These technologies include, but are not limited to, retention in settling tanks (where sediments settle out prior to discharge of water) and filtration using gravel and sand filters (to mechanically remove the sediment). If the dewatering activity is deemed by the Regional Water Board not to be covered by the Construction General Permit due to contamination from fuels or VOCs, the discharge may be allowed under the NPDES Permit No. CAG912002 issued by the Regional Water Board under Order No. R2-2017-0048 (Regional Water Board, 2019), which covers the discharge or reclamation of extracted and treated groundwater resulting from the cleanup of groundwater polluted by VOCs, fuel leaks, fuel additives, and other related wastes. If the discharge is not covered by any existing general NPDES permits, then the discharger could potentially prepare a Report of Waste Discharge and, if approved by the Regional Water Board, be issued site-specific WDRs under the NPDES regulations. Site-specific WDRs contain rigorous monitoring requirements and performance standards that, when implemented, ensure that receiving water quality is not substantially degraded.

If the water is not suitable for discharge to the storm drain (receiving water), as discussed above, dewatering effluent may be discharged to the sanitary sewer system if the City of Palo Alto's discharge criteria are met.

If it is infeasible to meet the requirements of the Construction General Permit or other general NPDES permit, acquire site-specific WDRs, or meet the City of Palo Alto's requirements, the construction contractor would be required to transport the dewatering effluent off-site for treatment sufficient to meet discharge requirements.

Compliance with state, regional, and local regulations listed above would ensure protection of surface water and groundwater quality. Therefore, impacts related to water quality during construction of the project would be less than significant.

Project Operation

The project would alter land use on the project site compared to existing conditions, which could increase the potential for pollutants of concern from vehicle traffic (e.g., leaks of fuels and lubricants, tire wear particulates, brake dust, and fallout from exhaust emissions) to be generated on the project site and conveyed in runoff during storm events. Debris and particulates that gather on impervious surfaces such as paved areas and roofs of buildings could also add heavy metals and sediment to the pollutant load in runoff. The proposed landscaping could contain residual pesticides and nutrients used for landscape maintenance, and the change in land use could also result in increased trash generation over existing conditions.

Stormwater runoff during project operation would be subject to the requirements of Section 35.34 of the Mountain View Municipal Code and the MRP because the project would discharge stormwater to the City of Mountain View's storm drain system and replace over 5,000 square feet of impervious surfaces. Provision C.3 of the MRP sets forth appropriate and site-specific source control, site design, and stormwater treatment measures for new and redevelopment projects to address both soluble and insoluble stormwater runoff pollutant discharges in order to protect the quality of surface water and groundwater. The project site is located in a catchment that drains to hardened channels and tidally influenced channels and is therefore exempt from hydromodification requirements (Regional Water Board, 2022).

In accordance with the requirements of provision C.3 of the MRP, the project would include LID measures to reduce runoff pollutant loads. Such LID measures could include bio-retention treatment areas, flow-through planters, catch basin filters, green roofs, and rainwater harvesting and on-site re-use. As required by Section 35.34 of the Mountain View Municipal Code, the Los Altos School District (LASD) would prepare a stormwater management plan in accordance with the City of Mountain View's guidelines and be responsible for ensuring that permanent stormwater pollution prevention measures are inspected to ensure they are working properly.

Stormwater runoff from the project site is not treated under existing conditions, and a large portion of project site is currently occupied by surface parking, which can contribute pollutants of concern from vehicles to stormwater runoff. The addition of stormwater treatment and significant reduction in surface parking (410 fewer parking spaces) under the project would reduce stormwater pollutants from vehicles compared to the existing conditions.

Following the completion of construction of the school campus, the future City of Mountain View park portion of the project site would remain in a temporary condition until the park is designed and developed by the City in the future. This temporary condition would include a layer of aggregate base material covering the ground surface and a temporary stormwater drainage system installed along the edge of the new shared LASD and park property line (and inside the park parcel property line) to prevent runoff from being conveyed onto the school campus portion of the project site. Permanent stormwater control and treatment systems would not be installed at the future park site until the park is developed by the City. Runoff from the future park site could contain sediment from the aggregate base material that would be placed on the ground surface and other pollutants that could accumulate on the ground surface. If temporary stormwater treatment systems are not installed and maintained at the future park site, then stormwater runoff from the future park site during the period following construction of the school campus and prior to construction of the park could contribute to the degradation of water quality. This is a potentially significant impact requiring mitigation. Implementation of Mitigation Measure HYDRO-1 below would ensure that this potential impact would be less than significant.

**Impact HYDRO-1: Stormwater runoff from the future park site during the period following construction of the school campus and prior to construction of the park could contribute to the degradation of water quality. (PS)**

> *Mitigation Measure HYDRO-1: The temporary stormwater drainage system that would be installed inside the edge of the future park site to* capture *runoff from the park site shall include a temporary stormwater treatment system such as a bio-retention treatment area to ensure that runoff from the future park site would not degrade water quality prior to construction of the future park. The Los Altos School District (LASD) shall be responsible for the inspection and maintenance of this temporary stormwater treatment system until the future park site is conveyed to the City of Mountain View by LASD, at which time inspection and maintenance of this temporary stormwater treatment system shall become the responsibility of the City. The design and maintenance of the temporary stormwater drainage system shall be included in the stormwater management plan to be submitted to*

*the City for review and approval prior to the City issuing the permits that would allow proposed stormwater drainage systems to connect to the City's existing stormwater drainage system. (LTS)*

Stormwater runoff from the project site is not treated under existing conditions; therefore, development and operation of the project in compliance with the Mountain View Municipal Code and MRP and implementation of Mitigation Measure HYDRO-1 should create a beneficial effect on the quality of stormwater runoff from the project site compared to the existing condition. Therefore, with implementation of Mitigation Measure HYDRO-1, impacts related to water quality during operation of the project would be less than significant.

*Altering Drainage Patterns*

The project would not include alteration of the course of a stream or river. As discussed under *Flooding* above, the project site is mapped by FEMA as being in Zone X, areas with reduced flood risk due to levees. The project site is not located in a 100-year flood hazard zone mapped by FEMA (FEMA, 2009 and 2023), and therefore the project would result in less-than-significant impacts related to impeding or redirecting flood flows.

Project construction activities would temporarily alter drainage patterns, expose soil to potential erosion, and create potential sources of polluted runoff. As described under *Water Quality* above, required compliance with the Construction General Permit would ensure that construction of the project would result in less-than-significant impacts related to erosion/siltation or creating sources of polluted runoff. The project would alter drainage patterns by creating new pervious and impervious surfaces and constructing new stormwater drainage systems on the site. During operation of the project, the school portion of the project site would be covered by structures, pavement, and landscaped areas, with no ongoing soil exposure or disturbance that could result in erosion and siltation. As described under *Water Quality* above, compliance with the Mountain View Municipal Code and MRP and implementation of Mitigation Measure HYDRO-1 would ensure that impacts related to erosion/sedimentation and polluted runoff would be less than significant during operation of the project.

The project would reduce stormwater runoff from the project site compared to the existing condition by reducing impervious surfaces compared to the existing condition and by installing LID stormwater treatment measures such as bioretention planters that would allow for infiltration of runoff from impervious surfaces. Stormwater control and treatment systems that would be installed on the project site would be appropriately designed and maintained to adequately convey runoff from the project site, as required by the Mountain View Municipal Code and MRP, which would ensure that on-site flooding or exceeding the capacity of on-site or off-site storm drain systems would not occur due to runoff from the project site.

As discussed under *Local Drainage* above, stormwater runoff from some areas to the south of the project site flows onto the project site as surface flow (BGT Land Surveying, 2023). The installation of new off-site storm drain systems to capture the runoff that currently flows onto the project site is planned to be performed by the owner of the southern adjacent property; however, the timing of the off-site storm drain improvements is currently unknown and may need to account for the project's proposed improvements along the southern boundary of the project site. Removal of existing on-site storm drain systems that capture and convey runoff from off-site areas could result in localized flooding on the project site and adjacent areas if new off-site storm drain systems are not yet installed. This is a potentially significant impact requiring mitigation. Implementation of Mitigation Measure HYDRO-2 below would ensure that this potential impact would be less than significant.

**Impact HYDRO-2: Removal of existing on-site storm drain systems that capture and convey runoff from off-site areas could result in localized flooding on the project site and southern adjacent areas if new off-site storm drain systems are not yet installed. (PS)**

> *Mitigation Measure HYDRO-2: The Los Altos School District (LASD) shall coordinate with the owner of the property adjacent to the south of the project site regarding the design and timing for construction of the project and the new off-site storm drain system improvements to ensure that the new off-site storm drain system would be installed prior to the removal of the existing storm drains on the project site that capture runoff from off-site areas. If the installation of new off-site storm drain systems would not be completed prior to the removal of the existing storm drains on the project site that capture runoff from the off-site area south of the project, the project shall incorporate additional storm water capture and treatment systems along its southern boundary into the project design and construction in order to manage stormwater runoff from this off-site area. (LTS)*

Implementation of Mitigation Measure HYDRO-2 would ensure that the project would result in less-than-significant impacts related to flooding or exceeding the capacity of existing stormwater drainage systems due to the alteration of drainage patterns.

*Conflict with a Water Quality Control Plan or Sustainable Groundwater Management Plan*

As described above under *Environmental Setting*, the Basin Plan is the water quality control plan that establishes beneficial water uses for waterways, water bodies, and groundwater within the region and is a master policy document for managing water quality in the region. The GMP for the Santa Clara and Llagas Subbasins has established the following sustainability goals related to groundwater supply, reliability, and protection:

- Manage groundwater to ensure sustainable supplies and avoid land subsidence.
- Aggressively protect groundwater from the threat of contamination.

These goals describe the overall objectives of Valley Water's groundwater management programs. The following basin management strategies are used to meet the sustainability goals (Valley Water, 2021):

- Manage groundwater in conjunction with surface water.
- Implement programs to protect and promote groundwater quality.
- Maintain and develop adequate groundwater models and monitoring networks.
- Work with regulatory and land use agencies to protect recharge areas, promote natural recharge, and prevent groundwater contamination.

As described under *Water Quality* above, the construction and operation of the project would be required to comply with NPDES permit requirements to protect water quality including the Construction General Permit and MRP, and implementation of Mitigation Measure HYDRO-1 would further ensure the protection of surface water quality during operation of the project. As described under *Groundwater Supplies* above, the project would have a beneficial effect related to groundwater recharge, and the project would not substantially decrease groundwater supplies or impede sustainable groundwater management of the basin. Therefore, potential impacts related to conflicting with or obstructing implementation of the Basin Plan or GMP for the Santa Clara and Llagas Subbasins would be less than significant with mitigation.

## Cumulative Impacts

This section evaluates cumulative impacts on hydrology and water quality. The analysis examines the effects of the project in the relevant geographic area in combination with other current projects and probable future projects. The geographic areas of concern for cumulative hydrology and water quality impacts are (1) the storm drains, creeks, and surface waters that receive runoff from the project site; (2) areas of flooding hazards that receive runoff from the project site; and (3) the Santa Clara Subbasin (for groundwater).

*Water Quality*

Stormwater discharged from past and existing land uses in the project region have contained pollutants that have cumulatively contributed to the impairment of the water quality in South San Francisco Bay. Stormwater regulations have become progressively more stringent since the passing of the Federal Clean Water Act, and current regulations now require municipalities and new developments to manage and treat all significant sources of stormwater pollutants. As discussed under *Water Quality* above, stormwater runoff from the project site would be managed and treated in accordance with the Construction General Permit, MRP, the Mountain View Municipal Code, and Mitigation Measure HYDRO-1. Other current and probable future projects would also be subject to existing regulations that protect stormwater quality, including applicable NPDES permit requirements and the Mountain View Municipal Code. Implementation of Mountain View General Plan policies discussed under *Regulatory Framework* above would further ensure that stormwater runoff from these projects would not contribute to degradation of water quality. As a result, the contribution of the project to the degradation of the water quality or conflict with a water quality control plan would not be cumulatively considerable; therefore, the cumulative impact would be less than significant.

*Groundwater Supplies*

Cumulative impacts on groundwater resources can occur when current and probable future projects include substantial construction dewatering, use of groundwater for water supply, and/or increases in impervious surfaces that reduce groundwater recharge. As discussed under *Groundwater Supplies* above, dewatering is not expected to be required during construction of the project; however, if construction dewatering is required it would be temporary, limited to shallow groundwater, and localized in the areas of excavations and, therefore, construction dewatering would not deplete local groundwater resources. Because the water supply for the project site and other current and probable future projects comes from surface water sources, the potential increase in water use under the project and other projects would not contribute to a decrease in groundwater resources. The project would reduce impervious surfaces compared to the existing condition, and therefore would increase groundwater recharge. As a result, project impacts on groundwater supplies or sustainable management of the groundwater basin would not be cumulatively considerable; therefore, the cumulative impact would be less than significant.

*Altering Drainage Patterns*

Current and probable future projects could result in changes to drainage patterns and/or increases in impervious surfaces, which could result in cumulative increases in stormwater discharges that can exceed the capacity of storm drain systems and contribute to flooding. Implementation of the Mountain View General Plan policies discussed under *Regulatory Framework* above would ensure the maintenance of the City of Mountain View's stormwater drainage infrastructure to reduce localized flooding. Current and probable future projects would also be subject to existing stormwater regulations and policies that encourage increased retention and infiltration of stormwater runoff, including the MRP, the Mountain View Municipal Code, and the Mountain View General Plan. As discussed under *Altering Drainage Patterns* above, the project would reduce stormwater runoff from the project site compared to the existing condition, and implementation of Mitigation Measure HYDRO-2 would ensure that the project would result in less-than-significant impacts related to flooding or exceeding the capacity of existing stormwater drainage systems due to the alteration of drainage patterns. As a result, the project would not alter drainage or increase runoff in a manner that could contribute to exceeding the capacity of storm drain systems or flooding; therefore, the cumulative impact would be less than significant.

*Release of Pollutants Due to Inundation*

The project site and other current and probable future project sites are not located in a 100-year flood hazard zone (FEMA, 2009 and 2023) or Tsunami Hazard Area (California Geologic Survey, 2021), and are not located near bodies of water that generate seiches. Therefore, potential cumulative impacts related to the release of pollutants in the event of inundation would be less than significant.

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# 4.10 LAND USE

## INTRODUCTION

The analysis of land use and planning in an Environmental Impact Report (EIR) generally considers the compatibility of a proposed project with neighboring areas, the project's potential to change or displace existing uses, and the project's consistency with relevant local land use policies that have been adopted with the intent to mitigate or avoid an environmental effect. With respect to land use conflicts or compatibility issues, the magnitude of these impacts depends on how a proposed project affects the existing development pattern, development intensity, traffic circulation, noise, air quality, and visual setting in the project site vicinity. The California Environmental Quality Act (CEQA) also requires consideration of whether a proposed project could physically divide a community.

This section evaluates the potential impacts of the proposed Los Altos School District (LASD) 10th Site School project (project) in relation to these issues, as required by CEQA. Because the project site is located within the Mountain View city limits, the land use policies and regulations of the City of Mountain View are addressed.

As discussed in *Chapter 1, Introduction*, of this EIR, pursuant to California Government Code Section 53094, the governing board of a school district may render city or county zoning ordinances and general plan requirements inapplicable to a proposed classroom facilities project. LASD has adopted a resolution[1] pursuant to Section 53094 exempting the project and the school campus from any zoning ordinances or regulations of the City of Mountain View, including, without limitation, the City's Municipal Code, General Plan, and related ordinances and regulations that otherwise would be applicable. This EIR nonetheless evaluates the project's consistency with local land use regulations and policies for the purposes of CEQA compliance, and also because it is LASD's goal that local land use policies and regulations be acknowledged and adhered to as much as feasible.

## ENVIRONMENTAL SETTING

### Regional Setting

The project site is located near the western edge of the City of Mountain View, not far from the junction of West El Camino Real and San Antonio Road. The City of Los Altos is located to the south and west of the site and the City of Palo Alto is located to the west. The main cities in this portion of the South Bay include Mountain View, Palo Alto, Los Altos, Los Altos Hills, and Sunnyvale. East of the project site, the southern end of San Francisco Bay lies just east of U.S. Highway 101.

[1] The Los Altos School District adopted Resolution No. 22/23-13 on April 3, 2023, to exempt itself from local land use controls.

LASD's boundaries include many areas of the City of Los Altos as well as parts of the City of Mountain View as shown in **Figure 4.10-1**, which shows LASD's elementary school attendance boundaries. The project site is in the area where students attend Covington Elementary School in Los Altos, based on boundaries established in 2007.

### Project Site Setting and Surrounding Land Uses

The project site is bounded by California Street and Showers Drive in Mountain View. Pacchetti Way is located at the north end of the project site.

The project site contains part of the existing San Antonio Center shopping center. Existing or previous (now closed) commercial operations on the project site include Kohl's Department Store, 24-Hour Fitness, JoAnn Fabrics, UU Noodle House, T-Mobile, and SushiBB/Pearl Café (see Figure 3-1 in *Chapter 3, Project Description*, of this EIR). The project site adjoins other uses at the San Antonio Center, such as the existing Walmart and Trader Joes which are located southwest of the project site.

West of Pacchetti Way are a large multi-story public parking garage and movie theater that are part of The Village at San Antonio Center. Southwest of the parking garage adjacent to Pacchetti Way is the six-story Hyatt Centric Mountain View hotel that has 167 hotel rooms. The Village Green Dog Park is located in The Village at San Antonio Center west of the site and just west of Pacchetti Way. Safeway, Pacific Catch Seafood Restaurant, and a variety of other commercial uses are also located to the southwest, between San Antonio Road and the project site.

Multi-family residential uses are located to the north and northeast of the site. These are primarily 1- and 2-story structures across California Street from the site.

California Street and Showers Drive are major thoroughfares that abut the project site and that provide access to other parts of Mountain View and Los Altos. The intersection of these two roads is signalized.

## REGULATORY FRAMEWORK

### Federal and State Regulations

There are no federal or state land use regulations that may affect on-site development.

### Local Regulations and Policies

*City of Mountain View General Plan*

The City of Mountain View's 2030 General Plan was adopted in 2012 and last amended in 2021 (City of Mountain View, 2012).

<u>Project Site Land Use Designation</u>

The General Plan land use designation for the project site is "Mixed-Use Center" (see **Figure 4.10-2**). The Mixed-Use Center designation is intended to promote pedestrian-oriented mixed-use

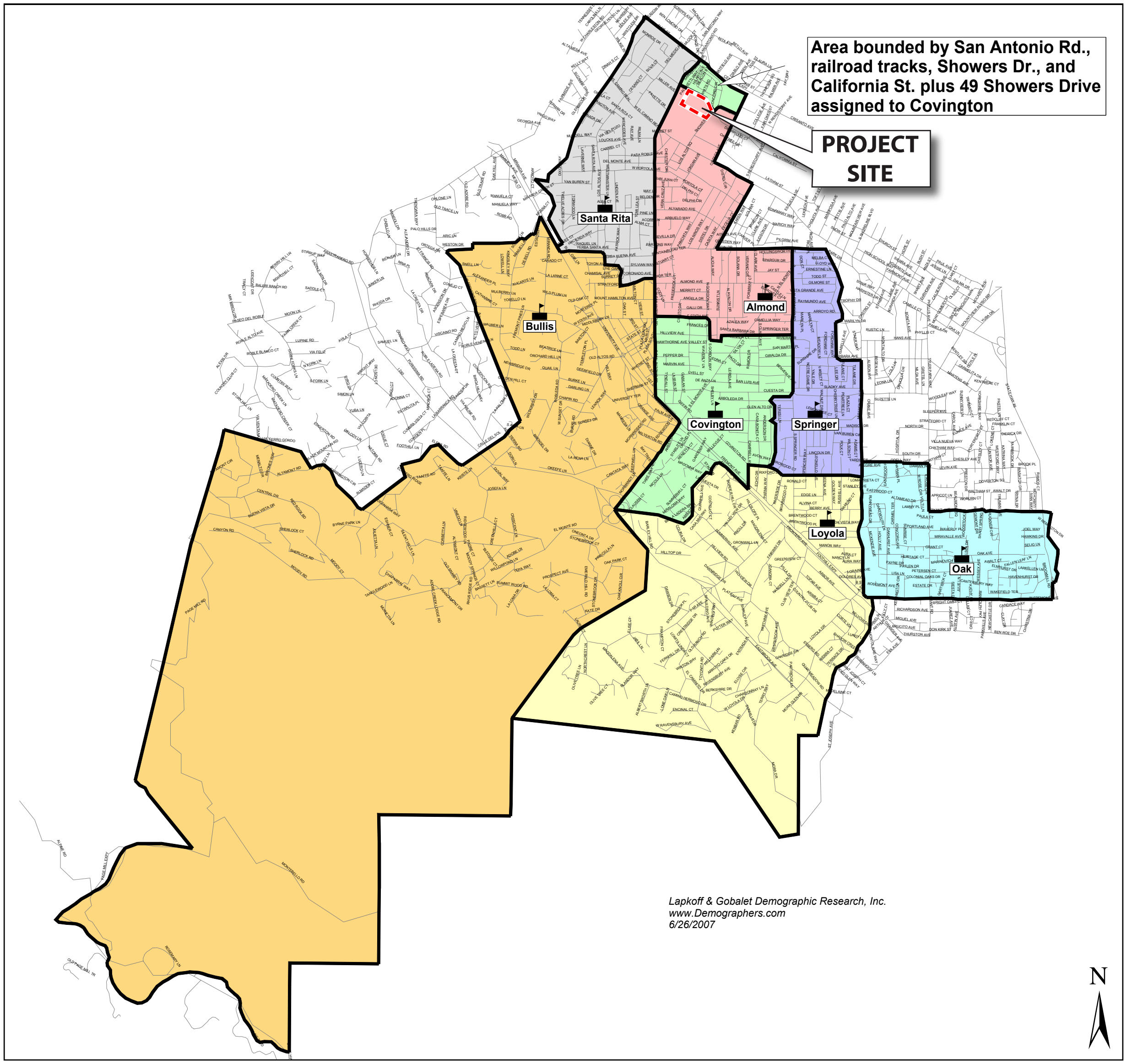
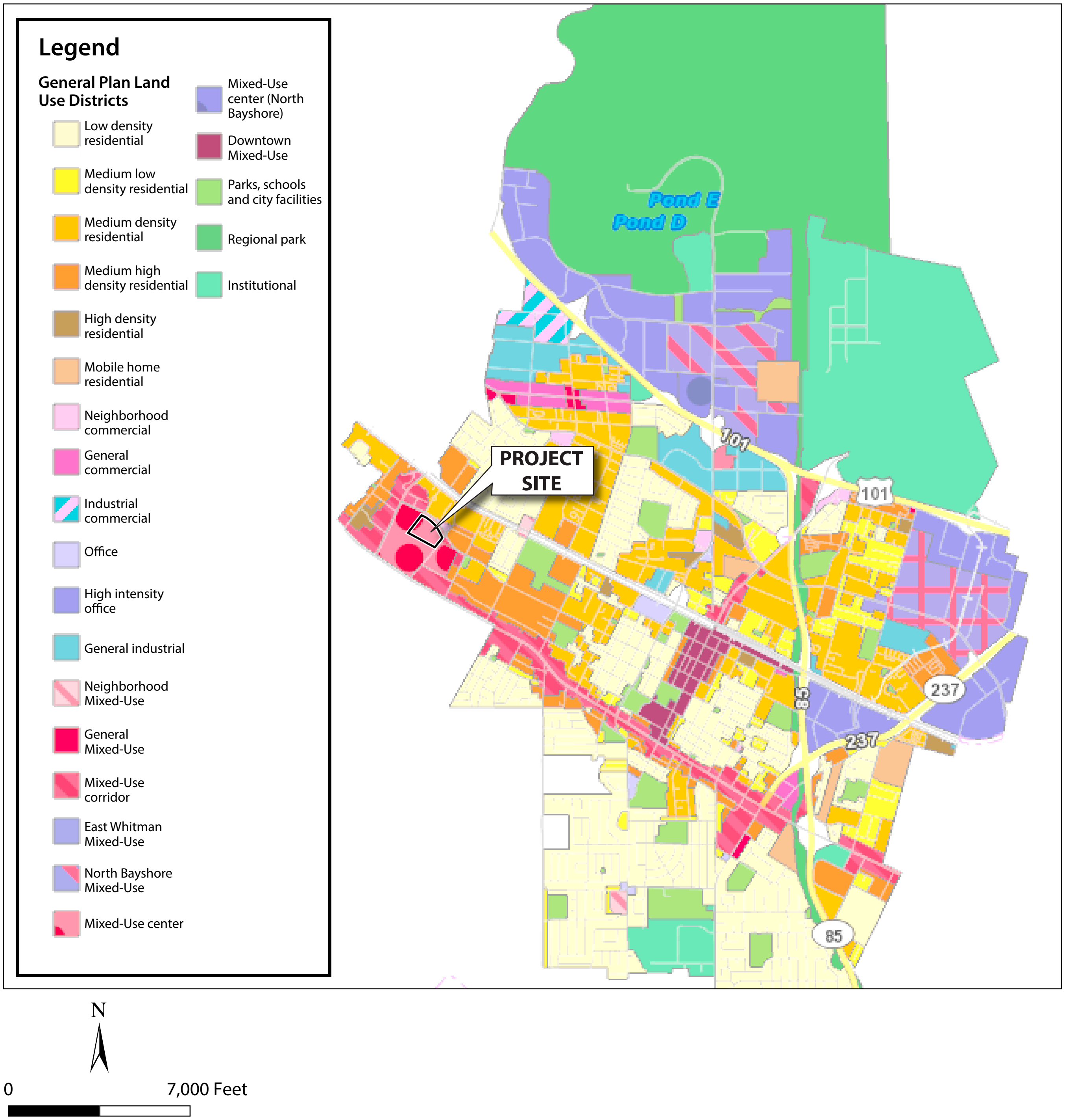



Figure 4.10-1

SOURCE: LASD, 2023

**ELEMENTARY SCHOOL ATTENDANCE BOUNDARIES OF LOS ALTOS SCHOOL DISTRICT**




SOURCE: City of Mountain View, 2012

Figure 4.10-2

**MOUNTAIN VIEW GENERAL PLAN LAND USE MAP**

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centers with complementary uses such as entertainment, restaurants, department stores and other retail, office, hotels, convention/assembly and/or civic uses and public spaces that draw visitors from surrounding neighborhoods and the region. Allowed land uses include offices, retail and personal services, multi-family residential, lodging, entertainment, parks, and plazas. The recommended land use intensity is a floor area ratio (FAR) of 2.35 (approximately 70 dwelling units per acre or 60 to 150 residents per acre), of which up to 0.75 FAR can be office or commercial. Building heights can be up to eight stories (City of Mountain View, 2012).

San Antonio Planning Area Provisions

The project site is part of the San Antonio Planning Area identified by the General Plan. The policy direction for this area of Mountain View is primarily the following (City of Mountain View, 2012):

- Improve accessibility for improved pedestrian safety and convenience, transit accessibility, bicycle amenities, and community gathering spaces;
- Expand community space in terms of attractive open areas and landscaped paths, taking advantage of the Hetch Hetchy right-of-way;
- Revitalize the San Antonio Center with new development, refurbished buildings, and other improvements for a mixed-use destination; and
- Enhance the mix of uses with new residential and commercial uses that support greater pedestrian activity.

"Village Center" Provisions

The City's General Plan addresses "village centers" as a planning strategy for neighborhoods throughout Mountain View, as a means of providing goods and services for local residents. Locating these village centers throughout the city has been an important means of carrying out sustainability principles by offering walkable, accessible destinations. The San Antonio Center, which includes the project site, is one of many such village centers and is designated as a large mixed-use area at the western edge of Mountain View.

"Change Area" Provisions

The General Plan also shows a portion of the San Antonio Planning Area, including the project site, as a "change area" where new land use intensities and design changes may occur. For this change area, the General Plan encourages pedestrian and bicycle connections, with wide sidewalks and tree wells to improve the pedestrian environment. The General Plan also encourages landscaped pedestrian paths through large parking areas; buildings designed to avoid long, uninterrupted walls along the street; plazas near major commercial nodes; and frequent windows facing the street (City of Mountain View, 2012).

Other Relevant Policies

Other General Plan policies that would apply to the project are as follows:

Policy LUD 3.1: *Land use and transportation.* Focus higher land use intensities and densities within a half-mile of public transit service, and along major commute corridors.

Policy LUD 3.2: *Mix of land uses.* Encourage a mix of land uses, housing types, retail and public amenities and public neighborhood open spaces accessible to the community.

Policy LUD 3.4: *Land use conflicts.* Minimize conflicts between different land uses.

Policy LUD 3.7: *Upgraded commercial areas.* Encourage the maintenance, enhancement and redevelopment of older commercial districts, shopping centers and corridors.

Policy LUD 3.8: *Preserved land use districts.* Promote and preserve commercial and industrial districts that support a diversified economic base.

Policy LUD 5.1: *Land use and village centers.* Encourage and promote centers that people can reach by bicycling or walking with a focus on areas identified in the Village Center Strategy Diagram.

Policy LUD 5.2: *Village center uses and character.* Encourage a mix of residential, commercial or other neighborhood-serving uses in village centers, with active ground-floor uses and public space to create an inviting pedestrian environment and a center of activity.

Policy LUD 5.3: *Community gathering.* Encourage community-gathering destinations such as plazas, open space or community facilities within village centers.

Policy LUD 5.4: *Connection*. Encourage pedestrian, bicycling and public transit connections and amenities between village centers and surrounding neighborhoods.

Policy LUD 6.1: *Neighborhood character.* Ensure that new development in or near residential neighborhoods is compatible with neighborhood character.

Policy LUD 6.2: *Equitable location of amenities.* Pursue equitable distribution of community amenities, public facilities and services within walking distance of residential neighborhoods.

Policy LUD 6.3: *Street presence.* Encourage building facades and frontages that create a presence at the street and along interior pedestrian paseos or pathways.

Policy LUD 6.5: *Pedestrian and bicycling improvements.* Support pedestrian and bicycling improvements and connections between neighborhoods.

Policy LUD 8.2: *Streets friendly to bicyclists and pedestrians.* Encourage a network of streets friendly to bicyclists and pedestrian that create a safe and comfortable environment and include convenient amenities and features.

Policy LUD 8.3: *Enhanced publicly accessible bicycle and pedestrian connections.* Encourage new and existing development to enhance publicly accessible bicycle, pedestrian, and transit connections.

Policy LUD 8.4: *Pedestrian-oriented civic and public spaces.* Create and encourage new pedestrian-oriented civic and public spaces throughout the city.

Policy LUD 8.5: *Pedestrian and bicycle amenities.* Encourage attractive pedestrian and bicycle amenities in new and existing developments, and ensure that roadway improvements address the needs of pedestrians and bicyclists.

Policy LUD 8.6: *Traffic-calming measures.* Carry out traffic-calming measures through the City's Neighborhood Traffic Management Program.

Policy LUD 8.7: *Sustainable streets.* Encourage sustainable streets that include drought-tolerant landscaping, natural stormwater treatment areas and other sustainable features.

Policy LUD 9.1: *Height and setback transitions.* Ensure that new development includes sensitive height and setback transitions to adjacent structures and surrounding neighborhoods.

Policy LUD 9.2: *Compatible transit-oriented development.* Encourage transit-oriented development that is compatible with surrounding uses and accessible to transit stations.

Policy LUD 9.3: *Enhanced public space.* Ensure that development enhances public spaces through these measures:

- Encourage strong pedestrian-oriented design with visible, accessible entrances and pathways from the street.
- Encourage pedestrian-scaled design elements such as stoops, canopies and porches.
- Encourage connections to pedestrian and bicycle facilities.
- Locate buildings near the edge of the sidewalk.
- Encourage design compatibility with surrounding uses.
- Locate parking lots to the rear or side of buildings.
- Encourage building articulation and use of special materials to provide visual interest.
- Promote and regulate high-quality sign materials, colors and design that are compatible with site and building design.
- Encourage attractive water-efficient landscaping on the ground level.

Policy LUD 10.2: *Low-impact development.* Encourage development to minimize or avoid disturbing natural resources and ecologically significant land features.

Policy LUD 10.5: *Building energy efficiency.* Incorporate energy-efficient design features and materials into new and remodeled buildings.

Policy LUD 10.6: *On-site energy technologies.* Support on-site renewable energy technologies that help reduce community energy demand.

Policy LUD 10.7: *Beneficial landscaping options.* Promote landscaping options that conserve water, support the natural environment and provide shade and food.

Policy LUD 10.8: *Access to healthful food.* Increase access to healthful local food by encouraging development to include water-efficient gardens, fruit trees and edible landscaping.

Policy LUD 10.9: *Sustainable roofs.* Encourage sustainable roofs to reduce a building's energy use, reduce the heat island effect of new and existing development and provide other ecological benefits.

*San Antonio Precise Plan*

The San Antonio Precise Plan was adopted in December 2014 and became effective January 8, 2015. The Precise Plan area includes 123 acres at the City's western entrance, and includes major streets such as El Camino Real, California Street, Showers Drive, and San Antonio Road. The project site is located in the central/east portion of the Precise Plan area (see **Figure 4.10-3**).

Guiding Principles

The following is a brief summary of the main guiding principles of the San Antonio Precise Plan:

- Revitalize the Precise Plan area;
- Support commercial vitality and diversity;
- Support increased housing supply and diversity;
- Seek broad public benefits;
- Promote improved urban design and placemaking;
- Improve connectivity;
- Create open space and pedestrian-oriented frontages;
- Improve transit access;
- Prioritize pedestrian improvements and bicycle connections; and
- Encourage shared parking.

Land Use Provisions

The Precise Plan designates the shopping center that includes the project site as a Mixed-Use Center Subarea, with portions shown as Open Space. The project site itself is designated Mixed-Use Center Subarea, with the Pacchetti Way frontage at the northwest edge of the site shown as Open Space (see Figure 4.10-3). The Hetch Hetchy right-of-way on the south side of the site is also shown as Open Space. Primary pedestrian routes and bicycle lanes are shown on all four sides of the project site (in Figures 2-3 and 2-4 of the Precise Plan; City of Mountain View, 2014).

The Precise Plan (Figure 2-9) also shows the project site as part of Master Plan Area No. 3, with the land uses shown at the project site as M-U: Residential/Regional Retail and M-U: Residential (City of Mountain View, 2014).

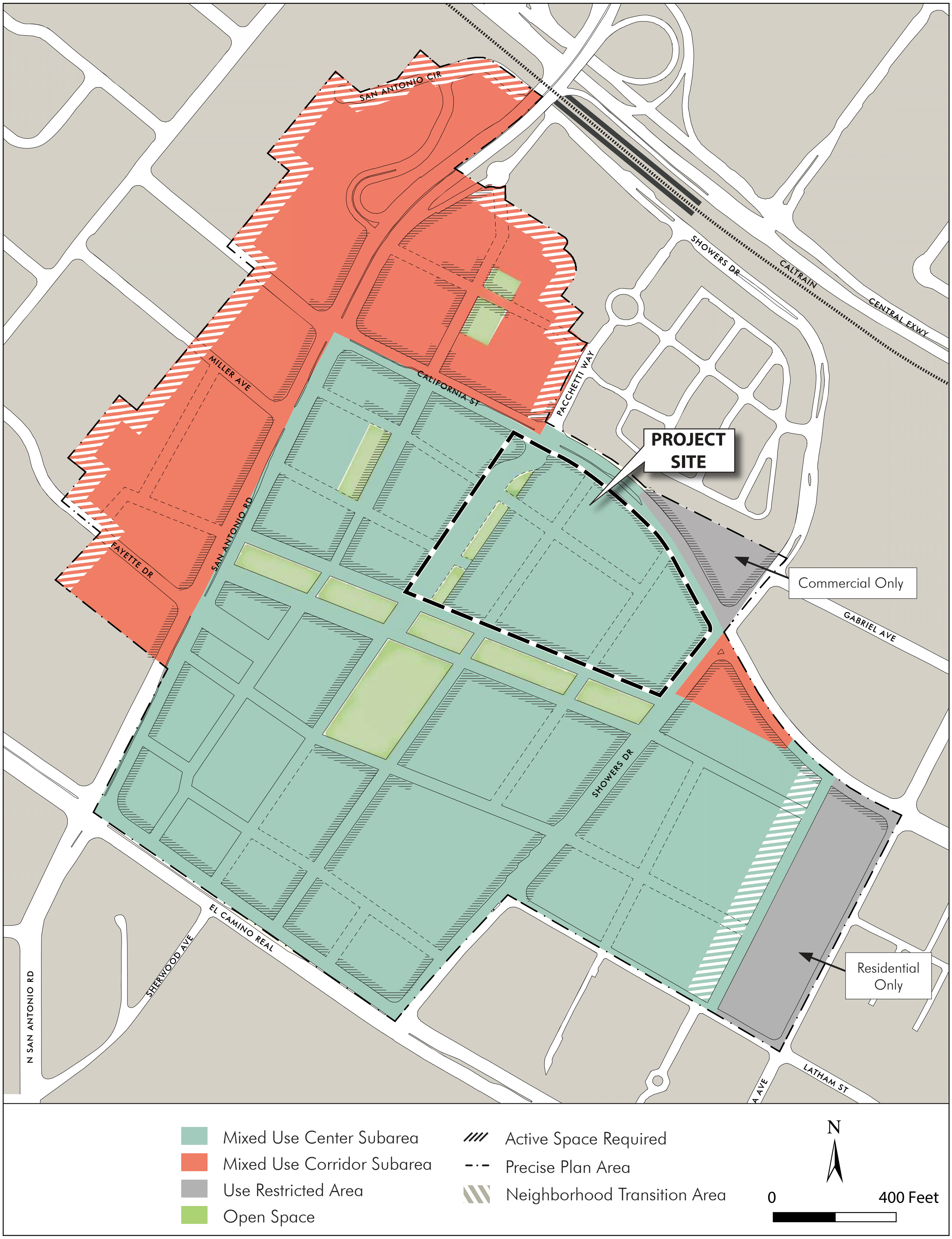


Figure 4.10-3

SAN ANTONIO PRECISE PLAN LAND USE SUBAREAS

SOURCE: City of Mountain View, 2012

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Other Provisions

Policy LU-1.7 of the Precise Plan states "Support creative public-private partnerships to facilitate development of a public school in the Plan Area." The Precise Plan also states that signing and pavement markings should be used in plan area crossings that are part of designated school routes, to distinguish them from typical crossings. According to Table 4-1 of the San Antonio Precise Plan, schools (public and private) within the plan area's Mixed-Use Center Subarea require approval of a provisional use permit as defined by the City's Zoning Ordinance.[2]

The San Antonio Precise Plan also addresses the transfer of development rights (TDRs) for public schools to support Precise Plan policies encouraging creative partnering solutions for development of a public school to meet the needs of the plan area. LASD has been working with the City since 2016 to facilitate TDRs. In January 2018, the Mountain View City Council approved a Gatekeeper request for development of Phase III of The Village at San Antonio (located northwest of the LASD project site) as a "receiving site" under the City of Mountain View/LASD TDR Program. Per this approval, the Phase III site applicant plans to execute a TDR purchase and sale agreement with LASD, identifying the Phase III site as a receiving site under the TDR Program, allowing a 150,000-gross-square-foot transfer of development rights from LASD's site to the Phase III project site (ICF, 2022). Table 5-2 of the San Antonio Precise Plan states that the City should continue to coordinate with LASD on "any potential school sites in the Plan Area" (City of Mountain View, 2014).

*City of Mountain View Zoning Code*

The City of Mountain View zoning for the project site and the rest of the San Antonio Center shopping center is P(40), which is a Planned Community District. This zoning district provides for uses that may be appropriately developed as a planned area development and requires an area of at least 2 acres. Building height, area, and other regulations are imposed as part of a precise plan or as conditions upon the granting of a planned community permit. The San Antonio Precise Plan that applies to the project site is addressed above.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Significance Criteria

For the purposes of this EIR and based on Appendix G of the CEQA Guidelines, implementation of the project would have a significant effect related to land use if it would:

a) Physically divide an established community; or

b) 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.

[2] LASD adopted Resolution No.22/23-13 on April 3, 2023, pursuant to Section 53094 of the California Government Code, exempting the project from any zoning ordinances or regulations of the City of Mountain View, including, without limitation, the City's Municipal Code, the City's General Plan, and related ordinances and regulations that otherwise would be applicable. Nevertheless, local codes and policies are evaluated in this Draft EIR because it is LASD's goal that local policies and regulations be acknowledged and adhered to a much as feasible.

### Less-than-Significant Impacts

*The project would not physically divide an established community*.

The physical division of an existing community commonly occurs when major infrastructure such as a highway, rail line, major roadway, or other similar land use separates a community and hinders access. While the project would remove buildings containing existing and former commercial businesses, access to adjoining commercial uses would remain. The new school would be located at the edge of a large commercial center and in the vicinity of residential neighborhoods. The San Antonio Center would continue to include Walmart and other commercial uses with adjoining large surface parking areas. The site would be easily accessible by foot or bicycle from the adjoining residential neighborhood to the northeast. The project therefore would not divide the established community.

*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.*

The project would not cause a significant environmental impact due to conflicts with land use plans, policies, or regulations. The project would be consistent with policies of the Mountain View General Plan and San Antonio Precise Plan related to:

- Providing for development close to transit and commute corridors (since the project would provide a new school close to these corridors);
- Providing a new mix of land uses in a commercial/residential neighborhood (since the project would provide a new school in the neighborhood);
- Minimizing land use conflicts (since the school would be compatible with surrounding uses);
- Encouraging walking and biking (since the project would provide paths at the edge of the school site);
- Providing “public space” in this “village” setting (since the project would provide playfields that could be shared by the community during non-school hours);
- Being compatible with surrounding residential uses (since project buildings would be no more than two stories in height and the project would provide multiple pedestrian and bicycle connections);
- Encouraging building frontages that create a street presence (since the project’s library would be placed prominently at the corner of California Street and Showers Drive and the Administrative entry and classrooms would front on California Street); and
- Providing pedestrian and bicycle connections (since the project would provide multiple connections around and through the site).

The proposed school would be a new use (a public facility) in an area designated for mixed use by the Mountain View General Plan and mixed-use residential and regional retail by the San Antonio Precise Plan. The project could be considered consistent with these land use designations and the project site’s Planned Community District zoning since the Precise Plan calls for a school in the plan area and allows schools within the Mixed-Use Center Subarea in which the project site is located with approval of a provisional use permit under the City’s Zoning Ordinance. In any case, as a school district, LASD would not be required to comply with these land use designations or zoning.

The project would also be within the recommended floor area ratio and height limit as established in the City's General Plan.

### Potentially Significant Impacts

No potentially significant impacts related to land use would result from the project.

### Cumulative Impacts

No significant cumulative land use impacts would result from the project.

As shown in Table 6-1 in *Chapter 6, Other CEQA Considerations*, of this EIR, the seven pending or permitted projects in the site vicinity would include residential and hotel uses, mixed-use developments with residential and office/retail uses, commercial buildings, and a park**.** These uses would not conflict with the proposed school use, nor would the school use contribute to plan or policy inconsistencies. Overall, the pending and permitted projects would be compatible with the land use plans for this area of the City of Mountain View**.** The project would not contribute to any significant cumulative land use impacts, and no mitigation measures would be necessary**.**

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# 4.11 NOISE

## INTRODUCTION

This section assesses potential impacts related to noise and vibration that could result from implementation of the proposed project. This section also discusses the basics of environmental acoustics, applicable regulations, and the existing noise environment in the project site vicinity.

## ENVIRONMENTAL SETTING

This section provides background information on noise and vibration and summarizes the existing noise environment.

### General Information on Noise

Noise is defined as unwanted sound that annoys or disturbs people and can have an adverse psychological or physiological effect on human health. Sound is measured in units of decibels (dB) on a logarithmic scale. Decibels describe the purely physical intensity of sound based on changes in air pressure but cannot accurately describe sound as perceived by the human ear, which is only capable of hearing sound within a limited frequency range. To better characterize noise levels perceived by a human ear, a dB scale called A-weighting (dBA) is typically used. On this scale, the low and high frequencies are given less weight than the middle frequencies. Decibels and other acoustical terms are defined in **Table 4.11-1**. Typical A-weighted noise levels at specific distances are shown for different noise sources in **Table 4.11-2.**

In an unconfined space, such as outdoors, noise attenuates with distance. Noise levels at a known distance from point sources are reduced by 6 dBA for every doubling of that distance for hard surfaces (e.g., asphalt) and by 7.5 dBA for every doubling of distance for soft surfaces (e.g., vegetative areas). Noise levels at a known distance from line sources (e.g., roads, highways, and railroads) are reduced by 3 dBA for every doubling of the distance for hard surfaces and 4.5 dBA for every doubling of distance for soft surfaces. Greater decreases in noise levels can result from the presence of intervening structures.

A typical method for determining a person's subjective reaction to a new noise is by comparing it to existing conditions. The following describes the general effects of noise on people (Charles M. Salter Associates, Inc., 1998):

- A 3-dBA change is considered barely noticeable.
- A 5-dBA change is considered clearly noticeable, but not dramatic.
- A 10-dBA change is perceived as a doubling or halving in loudness.

### TABLE 4.11-1 DEFINITION OF ACOUSTICAL TERMS

| Term | Definition |
|---|---|
| Ambient Noise Level | The existing level of environmental noise at a given location from all sources near and far. |
| Decibel (dB) | A unit describing the amplitude of sound on a logarithmic scale. Sound described in decibels is usually referred to as sound or noise "level." This unit is not used in this analysis because it includes frequencies that the human ear cannot detect. |
| Frequency (Hz) | The number of complete pressure fluctuations per second above and below atmospheric pressure. |
| A-Weighted Sound Level (dBA) | The sound pressure level in dBs as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound, in a manner similar to the frequency response of the human ear, and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted. |
| Maximum Sound Levels (Lmax) | The maximum sound level measured during a given measurement period. |
| Equivalent Noise Level (Leq) | The average A-weighted noise level during the measurement period. For this California Environmental Quality Act (CEQA) evaluation, Leq refers to a 1-hour period unless otherwise stated. |
| Community Noise Equivalent Level (CNEL) | The average A-weighted noise level during a 24-hour day, obtained after addition of 5 dBs to sound levels during the evening from 7:00 to 10:00 PM and after addition of 10 dBs to sound levels during the night between 10:00 PM and 7:00 AM. |
| Day/Night Noise Level (Ldn) | The average A-weighted noise level during a 24-hour day, obtained after addition of 10 dBs to sound levels during the night between 10:00 PM and 7:00 AM. |
| Vibration Decibel (VdB) | A unit describing the amplitude of vibration on a logarithmic scale. |
| Peak Particle Velocity (PPV) | The maximum instantaneous peak of a vibration signal. |
| Root Mean Square (RMS) Velocity | The average of the squared amplitude of a vibration signal. |
| Day/Night Noise Level (Ldn) | The average A-weighted noise level during a 24-hour day, obtained after addition of 10 dBs to sound levels during the night between 10:00 PM and 7:00 AM. |

Sources: Charles M. Salter Associates, Inc., 1998; Federal Transit Administration, 2018.

### TABLE 4.11-2 TYPICAL SOUND LEVELS MEASURED IN THE ENVIRONMENT AND INDUSTRY

| Noise Source (Distance in Feet) | A-Weighted Sound Level (dBA) |
|---|---|
| Jet Aircraft (200) | 112 |
| Subway Train (30) | 100 |
| Truck/Bus (50) | 85 |
| Vacuum Cleaner (10) | 70 |
| Automobile (50) | 65 |
| Normal Conversation (3) | 65 |
| Whisper (3) | 42 |

Source: Charles M. Salter Associates Inc., 1998.

Because sound pressure levels are based on a logarithmic scale, they cannot be added or subtracted using linear methods. For instance, if one noise source emits a sound level of 90 dBA, and a second source is placed beside the first that also emits a sound level of 90 dBA, the combined sound level is 93 dBA, not 180 dBA. In other words, a doubling of sound source results in an increase of 3 dBA. When the second noise source is lower than the first noise source by at least 10 dBA, the contribution from the second noise source to the overall sound level is negligible (i.e., close to zero). In such cases, no adjustment factor is needed because the contribution from the lower noise source makes no perceptible difference in what people can hear or measure. For example, if one noise source generates a noise level of 95 dBA and another noise source is added that generates a noise level of 80 dBA, the higher noise source will dominate the noise environment, and the combined noise level will remain at about 95 dBA.

Traffic noise levels are often expressed in terms of the hourly dBA. The noise levels generated by vehicular sources mainly depend on traffic volume, the speed, and the percent of trucks within the fleet. Increases in these three factors will lead to higher noise levels. As mentioned above, doubling the number of sources, such as traffic volume, increases the noise level by approximately 3 dBA due to the logarithmic nature of noise levels (FHWA, 2018).

## General Information on Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Several different methods are used to quantify vibration. Typically, groundborne vibration generated by human activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors to vibration include structures (especially older masonry structures) and people (especially residents, the elderly, and sick). Vibration amplitudes are usually expressed as either Peak Particle Velocity (PPV) or as Root Mean Square (RMS) velocity. PPV is appropriate for evaluating potential damage to buildings, but it is not suitable for evaluating human response to vibration because it takes the human body time to respond to vibration signals. The response of the human body to vibration is dependent on the average amplitude of a vibration event. Thus, RMS is more appropriate for evaluating human response to vibration. PPV and RMS are described in units of inches per second (in/sec), and RMS is also described in vibration decibels (VdB).

Groundborne vibration can transmit energy into buildings. This vibration can cause a rumbling sound and audible noise within the buildings, which is referred to as groundborne noise. Like noise that travels through the air, groundborne noise is usually measured in dBs or dBA. Groundborne noise is typically dominated by low-frequency components, and the non-linearity of human hearing causes sounds dominated by low-frequency components to seem louder than higher-frequency sounds with the same sound level. As a result, groundborne noise has the potential to disturb people at lower sound levels than broadband noise.

The relationship between groundborne vibration and groundborne noise depends on the frequency content of the vibration. For example, the groundborne noise measured in dBA will be approximately 40 dBA less than the groundborne vibration measured in VdB if the spectrum peak is around 30 Hz, and 25 dBA lower if the spectrum peak is around 60 Hz. Environmental vibration is rarely of sufficient magnitude to be perceptible or cause audible groundborne noise unless there is a specific vibration source close by, such as a railroad line.

### Noise-Sensitive Receptors

Noise-sensitive receptors are locations where people are more susceptible to the adverse effects of noise pollution, including, but not limited to, residences, schools, churches, hospitals, elderly-care facilities, hotels, libraries, and parks. The nearest noise-sensitive receptors to the project site include a hotel located approximately 60 feet northwest of the project site boundary, residences approximately 100 feet northeast of the project site boundary, and residences located approximately 120 feet east of the project site boundary.

### Vibration-Sensitive Receptors

Vibration-sensitive receptors are locations where people are more susceptible to the adverse effects of vibration. These may include residences and other buildings where people normally sleep such as hotels and hospitals, as well as buildings that have the potential for activity interference such as schools, churches, doctors' offices, concert halls, recording studios, and theaters (FTA, 2018). The nearest vibration-sensitive receptors to the project site include a hotel located approximately 60 feet northwest of the project site boundary, residences approximately 100 feet northeast of the project site boundary, and residences located approximately 120 feet east of the project site boundary.

In certain situations, vibration can also cause structural damage. Historic buildings tend to be more susceptible to vibration (due to age and less modern construction techniques) depending on the condition of the buildings. There are no historic buildings in the project site vicinity.

### Existing Ambient Noise Levels

According to the Noise Element of the City of Mountain View 2030 General Plan, the primary sources of noise in Mountain View include major roadways, railways, and airports. The existing noise levels throughout the city range from 51.2 to 72.1 dBA Leq. The roadway noise sources in the vicinity of the project site are traffic on California Street to the northeast, Pacchetti Way and San Antonio Road to the northwest, and Showers Drive to the southeast. The nearest railway is the Caltrain line located about 900 feet to the northeast of the project site. The nearest airports are the Palo Alto Airport located approximately 3.5 miles north of the project site and Moffett Federal Airfield located approximately 3 miles east of the project site. The project site is located outside of the Airport Influence Area (AIA) of the Palo Alto Airport (Windus, Walter B., 2008) and Moffett Federal Airfield (Windus, Walter B., 2012). The AIA is a composite of the areas surrounding these airports that are affected by noise, height, and safety considerations within which all development projects must be evaluated by local agencies to determine how the Airport Comprehensive Land Use Plan may affect the proposed development.

## REGULATORY FRAMEWORK

In California, noise is primarily regulated at the local level, through the implementation of general plan policies and local noise ordinances. The State of California provides guidance for the preparation of general plan noise elements. The purpose of a local general plan is to identify the general principles intended to guide land use and development, and cities and counties commonly adopt ordinances to specify the standards and requirements for implementing the principles of the general plan. Vibration is regulated at the federal and state level.

## Federal and State Regulations and Guidance

*Federal Transit Administration*

The Federal Transit Administration (FTA) has developed a general construction noise threshold of 90 dBA Leq at the nearest noise-sensitive receptor (FTA, 2006). According to the FTA, if the combined noise level in 1 hour from the two noisiest pieces of equipment exceeds the 90 dBA threshold at a residential land use (or other noise-sensitive receptors), then there may be a substantial adverse reaction.

The FTA has also developed vibration thresholds to prevent disturbances to (i.e., annoyance of) building occupants based on the frequency of a vibration event (FTA, 2018). Vibrations that are equal to or exceed the vibration thresholds could result in potential disturbance to people or activities. For infrequent vibration events, such as construction, FTA recommends a threshold of 80 VdB to prevent potential disturbance to residences and buildings where people normally sleep.

*California Department of Transportation*

The California Department of Transportation (Caltrans) has developed vibration thresholds based on PPV values to evaluate the potential impact of construction vibration on structures (Caltrans, 2020). Construction vibrations that are equal to or exceed the vibration thresholds could result in potential damage to structures. For frequent intermittent vibratory sources during construction (e.g., vibratory compaction equipment), Caltrans recommends a threshold of 0.3 in/sec to prevent potential damage to older residential structures.

*California Noise Control Act*

Sections 46000 to 46080 of the California Health and Safety Code codify the California Noise Control Act of 1973. The Act established the Office of Noise Control under the California Department of Health Services. It requires that the Office of Noise Control adopt, in coordination with the Office of Planning and Research, guidelines for the preparation of noise elements for general plans. The most recent guidelines are contained in the California Governor's Office of Planning and Research General Plan Guidelines (OPR, 2017). The document provides land use compatibility guidelines for cities and counties to use in general plans to reduce conflicts between land use and noise.

## Local Regulations and Policies

*Mountain View General Plan*

The City of Mountain View 2030 General Plan (City of Mountain View, 2012) includes the following policies related to noise:

Policy NOI 1.1: *Land use compatibility.* Use the Outdoor Noise Environment Guidelines as a guide for planning and development decisions.

Policy NOI 1.3: *Exceeding acceptable noise thresholds.* If noise levels in the area of a proposed project would exceed normally acceptable thresholds, the City shall require a detailed analysis of proposed noise reduction measures to determine whether the proposed use is compatible. As needed, noise insulation features shall be included in the design of such projects to reduce exterior noise levels to meet acceptable thresholds, or for uses with no active outdoor use areas, to ensure acceptable interior noise levels.

Policy NOI 1.4: *Site planning.* Use site planning and project design strategies to achieve the noise level standards in Land use compatibility and in 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: *Sensitive uses.* Minimize noise impacts on noise-sensitive land uses, such as residential uses, schools, hospitals and child-care facilities.

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

Policy NOI 1.8: *Moffett Federal Airfield.* Support efforts to minimize noise impacts from Moffett Federal Airfield in coordination with Santa Clara County's Comprehensive Land Use Plan.

Policy NOI 1.9: *Rail.* Reduce the effects of noise and vibration impacts from rail corridors.

*Mountain View Municipal Code*

Section 8.70 of the Mountain View Municipal Code includes the following policies regarding construction activities and related noises:

- **Hours of construction.** No construction activity shall commence prior to 7:00 AM nor continue later than 6:00 PM, Monday through Friday. No work is permitted on Saturday unless prior written approval is granted by the chief building official. The term "construction activity" shall include any physical activity on the construction site or in the staging area, including the delivery of materials. In approving modified hours, the chief building official may specifically designate and/or limit the activities permitted during the modified hours. No construction activity is allowed on Sunday or recognized holidays.

- **Modification.** At any time before commencement of or during construction activity, the chief building official may modify the permitted hours of construction upon 24 hours written notice to the contractor, applicant, developer, or owner. The chief building official can reduce the hours of construction activity below the 7:00 AM to 6:00 PM time frame or increase the allowable hours.
- **Sign required.** If the hours of construction activity are modified, then the general contractor, applicant, developer, or owner shall erect a sign at a prominent location on the construction site to advise subcontractors and material suppliers of the working hours. The contractor, owner or applicant shall immediately produce upon request any written order or permit from the chief building official pursuant to this section upon the request of any member of the public, the police or city staff.
- **Violation.** Violation of the allowed hours of construction activity, the chief building official order, required signage or this Section shall be a violation of this code.

Section 21.26 of the Mountain View Municipal Code requires the following for stationary equipment noise:

- No person shall own or operate on any property any stationary equipment, such as, but not limited to, air compressors, equipment for swimming pools, spas, or air conditioners, which produces a sound level exceeding 55 dB(A) (50 dB(A) during the night, 10:00 PM to 7:00 AM) when measured at any location on any receiving residentially used property, said measurement to utilize a sound level meter equal to or better than an ANSI Standard S 1.4-1971 Type 2 noise level meter.
- Any plans submitted for building, plumbing, electrical or mechanical/heating permit for any stationary equipment shall be accompanied by documentation of the equipment noise level when available and by noise mitigating devices or buffers appropriate to achieve the above noise limit. Initial granting of a permit for such equipment shall not affect the obligation of each person owning or operating such equipment for continued compliance with these noise level requirements.
- Operation of any equipment, as specified in this section, above the 55 dB(A) limit (50 dB(A) nighttime), may occur only if the owner or operator has obtained a conditional use permit. A permit to operate equipment which exceeds the limit may be granted by the zoning administrator only if 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. The manner of obtaining said permit and the rules governing its issuance and revocation shall be as specified in Mountain View City Code Section 36.43 and following, all relating to the issuance of conditional use permits.

# ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

## Significance Criteria

Implementation of the project would result in a significant impact related to noise and vibration if it would:

a) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

b) Generate excessive groundborne vibration or groundborne noise levels; or

c) 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, expose people residing or working in the project area to excessive noise levels.

The following significance criterion would not apply to the proposed project and is therefore excluded from further discussion in this impact analysis:

- *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 2 miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.* As discussed under *Existing Ambient Noise Levels*, the project site is not located within the vicinity of a private airstrip and is located outside of the AIA of the Palo Alto Airport and Moffett Federal Airfield. Therefore, the project would have no impact related to the exposure of people to excess noise levels from aircraft.

## Less-than-Significant Impacts

*Substantial Noise During Construction*

*Construction of the project would not result in a substantial temporary increase in ambient noise levels.*

Construction activities would temporarily increase noise levels in the vicinity of the project site. The primary source of noise during construction would be off-road equipment activities on the project site. Construction noise levels would vary from day to day depending on the quantity, type, and condition of the equipment being used; the type and duration of activity being performed; the distance between the noise source and the receptor; and the presence or absence of barriers. Demolition, excavation/grading, and foundation work are typically the noisiest phases of construction and would occur during the initial construction phases. The later phases of construction include activities that are typically quieter and occur within the building(s) being constructed, thereby providing a noise barrier between the construction activity and any nearby receptors.

To evaluate noise levels during project construction, the project proponent, LASD, provided a list of construction equipment that would be used for demolition. The equipment that would be used for the remaining construction phases was derived from the most recent version of the California Emissions Estimator Model (see *Section 4.2*, *Air Quality*, of this EIR). Pile driving, which generates extreme levels of noise, would not be used at the project site. The types of construction equipment that would be used at the project site and the associated noise calculations are included in **Appendix F**.

In accordance with guidance from the FTA (2006), construction noise impacts were evaluated by quantifying the maximum noise levels that would result from simultaneous operation of the two noisiest pieces of equipment near the perimeter of the project site closest to a sensitive receptor. As shown in **Table 4.11-3**, the project's construction noise levels were estimated at the nearest noise-sensitive receptor, a hotel located approximately 60 feet northwest of the project site boundary. Based on this analysis, project construction would not generate noise levels above the FTA's 90 dBA Leq threshold at the nearest noise-sensitive receptor. Therefore, project construction would not generate a substantial temporary increase in ambient noise levels in the project vicinity and this impact would be less than significant.

**TABLE 4.11-3 POTENTIAL NOISE IMPACT FROM PROJECT CONSTRUCTION EQUIPMENT**

| Construction Phase | Potential Noise Levels at Nearest Sensitive Receptor (dBA Leq) | Threshold (dBA Leq) | Threshold Exceeded? |
|---|---|---|---|
| Demolition | 83 | 90 | No |
| Site Preparation | 82 | | No |
| Grading | 84 | | No |
| Building Construction | 81 | | No |
| Paving | 83 | | No |
| Architectural Coating | 74 | | No |

Note: Estimated noise levels do not include implementation of any noise reduction measures.
Source. Noise calculations are included in **Appendix F**.

*Substantial Noise During Operation*

*Operation of the project would not result in a substantial permanent increase in ambient noise levels.*

The primary operation period noise generation sources from the proposed project school campus would include the use of stationary sources such as HVAC systems, playfield activities, and vehicle traffic on nearby roadways.

Stationary Sources

According to noise thresholds established in Section 21.26 of the Mountain View Municipal Code, noise from mechanical equipment such as HVAC systems shall not exceed a sound level of 55 dBA during the day and 50 dBA during the night at the nearest sensitive receptor. The proposed project would replace existing buildings that currently operate HVAC systems and other mechanical equipment over a larger building footprint. The noise generated by operation of the HVAC systems for the proposed project would be substantially the same as the existing condition. Therefore, project operation of stationary sources would not generate a substantial permanent increase in ambient noise levels in the project vicinity and this impact would be less than significant.

Playfield Activity

The project includes the development of playfields including soccer fields, a baseball/softball field, and basketball courts. It is assumed that the playfields would contain lighting, which would allow after-hours sports events to occur during evening hours up to 10:00 PM These playfields would not include an amplified-sound system. The hours of operation for the playfields would be between 4:00 PM to 10:00 PM Monday through Friday, and between 8:00 AM to 10:00 PM on Saturday and Sunday. The playfields have the capacity for 240 attendees and the maximum use would be limited to two games simultaneously. The major sources of potential noise during a typical game would include cheering, referee whistles, ball dribbling (basketball), and bat striking (baseball/softball).

The proposed playfields would replace an existing parking lot. According to the Noise Element of the Mountain View 2030 General Plan, typical parking lot activities generate approximately 60 dBA to 70 dBA Ldn at 50 feet. The proposed soccer fields would be the closest playfields to a noise-sensitive receptor, which is a hotel located about 100 to 400 to feet northwest of the soccer fields. According to noise measurement data collected at other schools in California, the noise levels for various playfields (e.g., soccer and baseball/softball) vary between about 49 and 60 dBA Leq at 50 feet (PlaceWorks, 2022), which would be lower than the existing ambient noise levels generated by the parking lot on the project site. Therefore, noise from playfield activities on the project site would not generate a substantial permanent increase in ambient noise levels in the project vicinity and this impact would be less than significant.

Vehicle Traffic

The change in ambient noise levels due to vehicle traffic generated by the project relative to the baseline condition was estimated based on trip generation data presented in the Multimodal Transportation Analysis prepared by Parisi Transportation Consulting for the project (Parisi Transportation Consulting, 2024). Traffic volumes were estimated from turning traffic counts at nearby road intersections measured in February 2023. It should be noted that the traffic counts were measured when the stores were not at full capacity; therefore, the analysis of the project's net change in noise levels due to traffic volumes is conservative because it does not account for the existing traffic conditions at full capacity.

According to the project traffic study, the project would generate a net increase in trips during the AM peak hour and net decreases in the PM pick-up and PM peak hours. **Table 4.11-4** summarizes the total vehicle volumes at major intersections near the project site during the AM peak hour for the following scenarios: existing conditions, existing plus project conditions, cumulative conditions, and cumulative plus project conditions. The proposed project would increase the existing traffic volume at nearby intersections by up to about 33 percent and the project combined with cumulative traffic would increase the existing traffic volume by up to about 64 percent during the AM peak hour.

**TABLE 4.11-4 TRAFFIC VOLUMES AT NEARBY INTERSECTIONS DURING AM PEAK HOUR**

| Intersection | Total Traffic Volume | Net Increase |
|---|---|---|
| **California Street and San Antonio Road** | | |
| Existing | 2,655 | 0% |
| Existing + Project | 2,772 | 4% |
| Cumulative | 3,793 | 43% |
| Cumulative + Project | 3,910 | 47% |
| **California Street and Pacchetti Way** | | |
| Existing | 778 | 0% |
| Existing + Project | 1,033 | 33% |
| Cumulative | 1,021 | 31% |
| Cumulative + Project | 1,276 | 64% |
| **California Street and Showers Drive** | | |
| Existing | 932 | 0% |
| Existing + Project | 1,070 | 15% |
| Cumulative | 1,180 | 27% |
| Cumulative + Project | 1,318 | 41% |
| **Showers Drive and Hetch Hetchy ROW** | | |
| Existing | 442 | 0% |
| Existing + Project | 561 | 27% |
| Cumulative | 581 | 31% |
| Cumulative + Project | 700 | 58% |

Notes: The net increase is estimated relative to the existing scenario.
Existing scenario = Existing traffic when stores operate at partial capacity.
Project + Existing = Existing traffic plus project-generated traffic.
Cumulative = Cumulative traffic.
Project + Cumulative = Cumulative traffic plus project-generated traffic.
Source: Traffic volumes were obtained from Parisi Transportation Consulting, 2024

As discussed above, the project would need to double the existing traffic volume on nearby roadways to increase the ambient noise level by approximately 3 dBA, which is considered a barely perceptible change. Because the project would not double existing traffic volumes at nearby roadway intersections, the project would not result in a perceptible increase in ambient noise levels. Therefore, noise from traffic generated by the project would not generate a substantial permanent increase in ambient noise levels in the project vicinity and this impact would be less than significant.

*Excessive Vibration During Construction*

*Construction of the project would not result in excessive groundborne vibration or groundborne noise levels.*

Construction can result in varying degrees of ground vibration depending on the type of equipment and activity. The primary types of equipment that could generate substantial ground vibration during project construction and the associated vibration calculations are included in **Appendix F**. To evaluate the project's potential vibration effects on nearby sensitive receptors, a buffer distance that would be needed to avoid exceeding the FTA (2018) and Caltrans (2020) construction vibration thresholds was estimated for each type of equipment. It was assumed that the equipment that could generate substantial ground vibration would be used near the existing and proposed buildings in the central and southern portions of the project site, and the nearest vibration-sensitive receptor would be a residence located 120 feet to the east.

The estimated buffer distances for potential disturbance to residents and damage to older residential buildings are summarized in **Tables 4.11-5** and **4.11-6**, respectively. Based on this analysis, project construction would not generate vibration levels above the vibration disturbance and building damage thresholds at nearby sensitive receptors. Therefore, project construction would not generate excessive groundborne vibration in the project vicinity and this impact would be less than significant.

**TABLE 4.11-5 POTENTIAL VIBRATION DISTURBANCE DURING CONSTRUCTION**

| Equipment | Vibration Threshold (VdB) | Buffer Distance to Disturbance Threshold (feet) | Distance to Closest Receptor (feet) | Threshold Exceeded? |
|---|---|---|---|---|
| Vibratory Roller | 80 | 73 | 120 | No |
| Large Bulldozer | | 43 | | No |
| Loaded Trucks | | 40 | | No |
| Small Bulldozer | | 5 | | No |

Source: Vibration calculations are included in **Appendix F**.

**TABLE 4.11-6 POTENTIAL VIBRATION DAMAGE TO BUILDINGS DURING CONSTRUCTION**

| Equipment | Vibration Threshold (in/sec) | Buffer Distance to Damage Threshold (feet) | Distance to Closest Receptor (feet) | Threshold Exceeded? |
|---|---|---|---|---|
| Vibratory Roller | 0.3 | 20 | 120 | No |
| Large bulldozer | | 11 | | No |
| Loaded trucks | | 10 | | No |
| Small bulldozer | | 1 | | No |

Source: Vibration calculations are included in **Appendix F**.

*Excessive Vibration During Operation*

*Operation of the project would not result in excessive groundborne vibration or groundborne noise levels.*

Operation of school facilities on the project site would not involve equipment or activities that generate excessive groundborne vibration or groundborne noise levels. Therefore, project operation would not generate excessive groundborne vibration in the project vicinity and this impact would be less than significant.

## Potentially Significant Impacts

No potentially significant impacts related to noise would result from the project.

## Cumulative Impacts

This analysis evaluates whether the impacts of the proposed project, together with the impacts of other pending projects in the vicinity, would result in a cumulatively significant impact with respect to noise or vibration. This analysis then considers whether the incremental contribution of the impacts associated with implementation of the proposed project would be significant. Both conditions must apply for a project's cumulative effects to rise to the level of a significant impact. Noise and vibration dissipate with increased distance from the source; therefore, cumulative noise and vibration impacts would not be expected unless new sources are located in close proximity to each other. Therefore, the geographic scope for assessing cumulative impacts related to noise and vibration includes sources on and adjacent to the project site.

*Substantial Noise*

The project, in combination with other foreseeable development in the vicinity, would not result in a substantial temporary or permanent increase in ambient noise levels.

A future City of Mountain View park would be developed on the northeast side of the project site. Because development of the park would occur after construction of the project, there would be no cumulative impacts related to construction noise. Operation of the future City park would not generate substantial traffic or other sources of noise. There are no other cumulative projects located on or adjacent to the project site that would result in a cumulatively significant impact with respect to noise. Therefore, the project would not result in a cumulatively considerable impact related to a substantial temporary or permanent increase in ambient noise levels.

*Excessive Vibration*

The project, in combination with other foreseeable development in the vicinity, would not result in excessive groundborne vibration or groundborne noise levels.

Construction of the future City park would occur after construction of the project; therefore, there would be no cumulative impacts related to construction vibration. Operation of the future City park would not generate substantial vibration. There are no other cumulative projects located on or adjacent to the project site that would result in a cumulatively significant impact with respect to vibration. Therefore, the project would not result in cumulatively considerable impact related to excessive groundborne vibration or groundborne noise levels.

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# 4.12 PUBLIC SERVICES

## INTRODUCTION

This section of the Draft Environmental Impact Report (EIR) describes the existing setting and the project's potential impacts on fire protection, police, schools, parks, and other public services. Parks and other recreational facilities are addressed in more detail in *Section 4.13, Recreation*, of this EIR. Emergency response/evacuation and emergency access issues are addressed in *Section 4.8, Hazards and Hazardous Materials*, and *Section 4.14, Transportation,* of this EIR.

## ENVIRONMENTAL SETTING

### Fire Protection and Emergency Medical Services

The Mountain View Fire Department (MVFD) provides fire protection and emergency medical services in Mountain View, including at the project site and in the surrounding area.

*Staffing*

MVFD staff includes one fire chief, one operations deputy fire chief, one Office of Emergency Services coordinator, one executive assistant, one senior management analyst, one fire marshal, three shift battalion chiefs, one training battalion chief, one deputy fire marshal, 18 captains, one training captain, 18 engineers, 27 firefighter/paramedics, six environmental safety staff, seven fire and building safety staff, and three clerical staff (MVFD, 2022).

*Fire Stations*

The MVFD maintains five fire stations. The closest stations to the project site are Station 1, located at 251 South Shoreline Boulevard approximately 1.6 miles southeast of the project site; and Station 3, located at 301 North Rengstorff Avenue approximately 1.1 miles northeast of the project site. Station 1 has nine staff per shift and houses an engine company, a ladder truck company, a rescue unit, and a battalion chief. Station 3 has three staff per shift and houses an engine company and a California Office of Emergency Services engine (MVFD, 2022).

*Response Times*

The MVFD's goal is to respond to each emergency call within 6 minutes (City of Mountain View, 2012a). A 2020 study conducted for the MVFD found that Mountain View's existing fire station distribution provides first-due unit call-to-arrival response performance that is slightly longer than the 730-minute (7 minutes; 30 seconds) best practice goal for an urban area. The MVFD's 90th percentile call to first-due unit arrival performance was 8:14 minutes, or 10 percent slower than the recommended 7:30-minute goal, primarily due to slower-than-desired travel times. Response times for Station 1 and Station 3 were shorter (7:30 minutes and 8:17 minutes, respectively) than response times from Mountain View's other three stations, however (MVFD, 2020).

*Insurance Services Office (ISO) Rating*

The MVFD has a Class 1 rating from the Insurance Services Office (ISO), an organization that independently evaluates municipal fire protection efforts in communities throughout the United States. The Class 1 rating is the highest possible score that can be given to any fire department nationwide. The ISO ratings process involves a periodic, detailed analysis of all fire department equipment and operations, the city's water system, and the emergency 9-1-1 communications system (MVFD, 2023).

## Police Services

The Mountain View Police Department (MVPD) provides police services in Mountain View, including at the project site and in the surrounding area. MVPD headquarters is at 1000 Villa Street, approximately 2 miles southeast of the project site (MVPD, 2021).

*Staffing*

The MVPD has 142 full-time, 1.5 regular part-time, and 1 limited-period employees to serve a city population of 82,376. The MVPD has one police chief and one deputy police chief, with the remaining personnel working in administration, field operations, special operations, and public safety support services (MVPD, 2021).

*Beats and Response Times*

The MVPD divides Mountain View into four geographic beats. The project site is in Beat 2, which encompasses the area bounded by the Central Expressway, South Shoreline Boulevard, and San Antonio Road (MVPD, 2021).

The MVPD's goal is to respond to high priority calls in less than 4 minutes (City of Mountain View, 2012a). In 2021, response time to "Emergency" and "Priority 1" calls (i.e., the time from the first unit being dispatched to the first unit arriving) was 4 minutes or less 58.4 percent of the time (or in 758 out of a total of 1,296 calls). In Beat 2, the average response time to all calls was 16.3 minutes and the median response time to all calls was 8.1 minutes (MVPD, 2021).

## Other Public Services and Facilities

Public school services for Mountain View residents are provided by the Mountain View Whisman School District, the Mountain View-Los Altos Union High School District, and the Los Altos School District (LASD) (City of Mountain View, 2012b).

Other public services and facilities in Mountain View include the Mountain View Library, Mountain View Center for Performing Arts, Senior Center, Child Care Center, Community Center, two swimming pools, and a tennis complex. These facilities are in the Downtown Civic Center area and in two community parks (City of Mountain View, 2012a). Parks and other recreational facilities are addressed in more detail in *Section 4.13, Recreation*, of this EIR.

## REGULATORY FRAMEWORK

### Federal and State Regulations

No federal regulations related to fire protection, police, or other public services would apply to the project. The project would be required to comply with applicable California Fire Code regulations and would be subject to fire safety and campus security measures required by the Division of the State Architect.

### Local Regulations and Policies

The City of Mountain View's 2030 General Plan contains the following policies that would apply to the project and were adopted for the purpose of avoiding or mitigating an environmental impact related to public services (City of Mountain View, 2012a):

Policy PSA 1.1: *Adequate staffing.* Maintain adequate police and fire staffing, performance levels and facilities to serve the needs of the community.

Policy PSA 1.2: *Design for safety.* Support and promote crime prevention and fire safety strategies in the design of new developments.

Policy PSA 2.7: *Police service levels and facilities.* Ensure Mountain View Police Department service levels and facilities meet demands from new growth and development.

Policy POS 5.3: *School facilities.* Ensure school facilities are constructed to serve community needs to the extent allowed by state law.

Policy POS 5.4: *School facility needs.* Collaborate with local school districts on their facility needs and provide information on development and growth trends.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Significance Criteria

For the purposes of this EIR and based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, implementation of the project would have a significant effect on public services if it would:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: fire protection; police protection; schools; parks; or other public facilities.

For fire protection and police services, Appendix G further provides that a project would have a significant impact if it would:

b) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or

c) Result in inadequate emergency access.

Emergency response/evacuation and emergency access issues are addressed in *Section 4.8, Hazards and Hazardous Materials,* and *Section 4.14, Transportation*, of this EIR.

## Less-than-Significant Impacts

*Impacts on Fire Protection, Police, and Other Public Services*

*The project may increase demands for fire protection, police, and other public services, but not to the extent that new or physically altered fire stations, police facilities, or other public facilities would be needed to maintain acceptable service ratios, response times, or other performance objectives.*

As described in *Chapter 3, Project Description*, of this EIR, the project would replace 137,940 square feet of commercial buildings in the San Antonio Center shopping center with a new two-story school that could serve up to 900 students. The project site is already served by the MVFD, MVPD, and other public facilities and services.

Conservatively assuming that the school would generate more calls for service than existing and former commercial uses at the project site have generated, the project may increase demands for fire protection and police services. Any increase in demand would not be large enough to require new or physically altered fire stations or police facilities, however, especially since the project would be located in an already-developed area and would replace existing commercial uses that have the potential to generate calls for service. The project would be required to comply with applicable California Fire Code regulations and would be subject to fire safety and campus security measures required by the Division of the State Architect, as noted under *Regulatory Framework* above. The project includes site security measures, such as perimeter fencing, gates, and the proposed quadrangle design that would allow the school buildings and outdoor gathering and lunch space to be fully secure during the school day (see *Chapter 3, Project Description*, of this EIR).

The project is not expected to create a need for new or altered public school facilities or other public facilities, since the project itself would provide a new school along with other community services and facilities, as described in *Chapter 3, Project Description*, of this EIR. For evaluation of the project's impacts on parks and other recreational facilities, see *Section 4.13, Recreation*, of this EIR.

For these reasons, the project's impact on public services would be less than significant, and no mitigation is necessary.

## Potentially Significant Impacts

The project would not have any potentially significant impacts on fire protection, police, or other public services.

### Cumulative Impacts

For fire protection, police, and other public facilities and services, the geographic scope for assessing cumulative impacts is the area within the Mountain View city limits, which is served by the MVFD, the MVPD, and other City of Mountain View departments. Projects in Mountain View that are pending, approved, or under construction in the project site vicinity would provide for net increases of 747 housing units, 82 hotel rooms, and 74,455 square feet of commercial (retail and office) building space (see Table 6-1 and Figure 6-1 in *Chapter 6, Other CEQA Considerations*, of this EIR). Anticipated development also includes a 2-acre future City park on the project site (see *Chapter 3, Project Description*, and Table 6-1 and Figure 6-1 in *Chapter 6, Other CEQA Considerations*, of this EIR).

The proposed LASD 10th Site School project, in conjunction with these and other past, present, and reasonably foreseeable future projects, could result in a cumulative increase in demand for fire protection and police services. As discussed in the above project-specific analysis, however, any net increase in service demand from the proposed project would not affect these services enough to create the need for new or expanded facilities. The project would be subject to California Fire Code regulations and fire safety and campus security measures required by the Division of the State Architect. Other projects in the Mountain View city limits would be subject to standard requirements for fire safety and site security.

In addition, the 2014 EIR on the San Antonio Precise Plan (which encompasses the project site and surrounding areas), the 2022 EIR Addendum on San Antonio Precise Plan amendments for The Village at San Antonio-Phase III project (a proposed development in the project site vicinity), and the 2022 EIR on the citywide Mountain View Housing Element update all concluded that anticipated population increases and other cumulative growth would not be expected to create a need for new or altered fire protection or police facilities (LSA Associates, Inc., 2014; ICF, 2022; City of Mountain View, 2022).

For these reasons, it is reasonable to conclude that the project would not result in or contribute to any significant cumulative fire protection or police service impacts. The project would not contribute to any cumulative impacts on schools or other public services since, as discussed in the above project-specific analysis, the project would have no impact on those services.

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# 4.13 RECREATION

## INTRODUCTION

This section of the Draft Environmental Impact Report (EIR) describes parks and other recreational facilities in the vicinity of the project site and the project's potential impacts on these facilities.

## ENVIRONMENTAL SETTING

### Citywide Setting

The City of Mountain View Parks Division maintains 43 urban parks and 9.95 miles of bicycle and pedestrian trails along Stevens Creek, Permanente Creek, and the Hetch Hetchy right-of-way. The Parks Division is also responsible for other regional open spaces throughout the city (City of Mountain View, 2023b).

Mountain View has approximately 1,000 acres of parks and open space. Two large regional open spaces—Shoreline at Mountain View Regional Park and Stevens Creek Trail—account for about 80 percent of Mountain View's total parks and open space acreage. Other parks in the city offer recreational amenities including play structures, aquatics, tennis facilities, athletic fields, and picnic areas. Major public recreational facilities such as the Senior Center, Community Center, two swimming pools, and a tennis complex are located in the Downtown Civic Center area and in two community parks (City of Mountain View, 2012).

School sites are an important part of the city's park system, since Mountain View has many City-owned mini-parks but few larger neighborhood parks. School sites provide the large areas (typically 5 acres or more) needed for athletic activities such as baseball, softball, football, and soccer. The City of Mountain View has a longstanding policy of developing cooperative agreements with school districts, including the Los Altos School District (LASD), to allow use of school open space as neighborhood parks. This policy has allowed joint use of 12 school park sites for recreation outside of school hours (City of Mountain View, 2014a; City of Mountain View, 2012).

### Project Site Setting

Parks and other recreational facilities within an approximately 0.5-mile radius of the project site include the following (City of Mountain View, 2012; City of Mountain View, 2023a):

- Klein Park, a 1.36-acre mini-park located about 0.2 mile southeast of the project site at the intersection of California Street and Ortega Avenue. This park has a basketball court, a children's playground, passive areas, and a picnic area.
- Del Medio Park, a 0.38-acre mini-park located about 0.5 mile northwest of the project site near the intersection of California Street and Del Medio Avenue. This park has a children's playground, swings, outdoor exercise equipment, passive areas, benches, and a picnic area.

- Rengstorff Park, a 16.92-acre community park located about 0.5 mile southeast of the project site at the intersection of Rengstorff Avenue and Crisanto Avenue. This park has barbecue facilities, a baseball field, a basketball court, a skate park, a children's playground, passive areas, a picnic area, a softball field, a swimming pool, tennis courts, an outdoor volleyball court, and restrooms. The Mountain View Community Center is located in this park.
- Mora Park, a mini-park located about 0.3 mile east of the project site near the intersection of Ortega Avenue and Mora Place. This park has a children's play area, fitness equipment, a public art bench, open lawn space, and a small seating area.

The project site is located in the San Antonio planning area, identified by the City's Parks and Open Space Plan as the area having the greatest need for additional open space. The San Antonio planning area is one of seven planning areas that do not meet the City's standard of providing 3 acres of open space per 1,000 residents (City of Mountain View, 2014a).

The Hetch Hetchy right-of-way, owned by the City and County of San Francisco, extends generally in an east-west direction through Mountain View, including along the southern boundary of the project site. In the eastern part of the city, part of this right-of-way has been developed as a trail, and the City has noted the opportunity to do the same for the portion of the right-of-way that extends through the San Antonio planning area where the project site is located (City of Mountain View, 2012; City of Mountain View, 2014a).

## REGULATORY FRAMEWORK

### Federal and State Regulations

There are no federal or state regulations that are relevant to the project's potential impacts on parks and other recreational facilities.

### Local Regulations and Policies

*Mountain View General Plan*

The City of Mountain View's 2030 General Plan contains the following policies that would apply to the project and were adopted for the purpose of avoiding or mitigating an environmental impact related to parks and recreation (City of Mountain View, 2012):

Policy POS 1.1: *Additional parkland.* Expand park and open space resources to meet current City standards for open space acreage and population in each neighborhood.

Policy POS 2.1: Distribution *of parks.* Give priority for park acquisition to the Planning Areas identified in the Parks and Open Space Plan.

Policy POS 5.1: *Cooperation with school districts.* Continue cooperative arrangements with school districts to use open space and facilities at schools for public parks, playgrounds and recreation programs and establish new arrangements.

Policy POS 5.2: *Schools and open space.* Collaborate with the school district on new school development and intensification to accommodate population growth while preserving and protecting public parks and playgrounds.

Policy LUD 21.5: *Hetch Hetchy right-of-way.* Promote the use of the Hetch Hetchy right-of-way for open space and mobility improvements in the area.

Policy LUD 22.3: *Gathering spaces.* Encourage new plazas, open space and other gathering spaces in the San Antonio Center.

*Mountain View Parks and Open Space Plan*

The Mountain View Parks and Open Space Plan includes the following relevant recommendations (City of Mountain View, 2014a):

**City-Wide Priority 2**:

Acquire open space throughout the City for neighborhood parks and mini-parks, especially in neighborhoods deemed most deficient in open space.

**Planning Area Priorities:**

a. San Antonio

Acquire land in the midsection of the San Antonio Planning Area for the development of a mini-park, preferably on the north side of California Street, between Showers Drive, Central Expressway, and Rengstorff Avenue.

*San Antonio Precise Plan*

The City of Mountain View's San Antonio Precise Plan area includes the project site, and the Precise Plan designates the Hetch Hetchy right-of-way and the Pacchetti Way frontage adjoining the project site as Open Space. For the East San Antonio Center Master Plan Area in which the project site is located, the Precise Plan envisions "Major open space improvements, including a central publicly accessible park and the planned Hetch Hetchy greenway" (City of Mountain View, 2014b).

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Significance Criteria

For the purposes of this EIR and based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, implementation of the project would have a significant effect on parks and other recreational facilities if it would:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

   i. Parks.

b) Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or

c) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

## Less-than-Significant Impacts

*Increased Demand Causing Deterioration of or Need for New or Altered Parks or Other Recreational Facilities*

*The project would not increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, or such that new or altered facilities would be needed.*

The project would not result in the need for new or altered parks or increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. As described in *Chapter 3, Project Description*, of this EIR, the proposed school campus would provide the following recreational facilities: 3.26 acres of active use playfields, 12,900 square feet of asphalt play surface, a campus garden, a 12,000-square-foot gymnasium, and possibly an additional small gymnasium (2,300 square feet). These on-site facilities are expected to be adequate to serve the recreational needs of the project's student population, which would number up to 900 students.

In addition, by partnering with the City of Mountain View, LASD is planning for the project's recreational facilities to be available to the community before and after school and beyond the ages of children enrolled in the school (see *Chapter 3, Project Description*). The project would also provide for a 2.2-acre area of the project site to be conveyed to the City of Mountain View for future development of a neighborhood park (see *Chapter 3, Project Description*). These aspects of the project would further City of Mountain View goals and policies for parks and other recreational facilities and help meet the demand from other anticipated development in the area (see *Cumulative Impacts* below).

For these reasons, the project would not be expected to result in the need for new or altered parks or cause deterioration of existing parks or other recreational facilities. The impact would be less than significant, and no mitigation is necessary.

*Impact of Recreational Facilities Included in Project*

*The project would include recreational facilities and would not require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.*

The project would provide on-site recreational facilities consisting of 3.26 acres of active use playfields, 12,900 square feet of asphalt play surface, a campus garden, a 12,000-square-foot gymnasium, and possibly an additional small gymnasium (2,300 square feet), as described above and in *Chapter 3, Project Description*, of this Draft EIR. The environmental impacts of constructing these facilities are evaluated throughout this Draft EIR as part of the analysis of the project as a whole. The proposed on-site recreational facilities would not have any specific adverse physical effects on the environment. As described above, the proposed on-site facilities are expected to be adequate to serve the recreational needs of the project's student population, and therefore the project would not create a need for construction or expansion of other recreational facilities. The impact would be less than significant, and no mitigation is necessary.

As noted above, the project would also provide for a 2.2-acre area of the project site to be conveyed to the City of Mountain View for a future neighborhood park. Development of this park is not part of the project evaluated in this EIR. Future development of this neighborhood park is addressed under *Cumulative Impacts* in this section (below) and in other sections of this Draft EIR.

## Potentially Significant Impacts

The project would not have any potentially significant impacts related to parks or other recreational facilities.

## Cumulative Impacts

For parks and other recreational facilities, the geographic scope for assessing cumulative impacts is the area within the Mountain View city limits, since this area contains the recreational facilities that are most likely to be used by students and others on the school campus.

The proposed LASD 10th Site School project, in conjunction with other past, present, and reasonably foreseeable future projects, could result in a cumulative increase in demand for recreational facilities in the area. The cumulative increase in demand would result from the project along with existing and future development in the area, particularly residential development. Projects in Mountain View that are pending, approved, or under construction in the project site vicinity would provide for net increases of 747 housing units, 82 hotel rooms, and 74,455 square feet of commercial (retail and office) building space (see Table 6-1 and Figure 6-1 in *Chapter 6, Other CEQA Considerations*, of this EIR). As noted above, anticipated development also includes a 2.2-acre future City park on the project site (see *Chapter 3, Project Description*, and Table 6-1 and Figure 6-1 in *Chapter 6, Other CEQA Considerations*, of this EIR).

As discussed in the above project-specific analysis, demand from the project would not result in a significant impact on recreational facilities or create the need for new or expanded facilities, because the recreational needs of the project's students would be met on-site. In addition, the project would make on-site recreational facilities available to the community and would convey 2.2 acres of the project site to the City of Mountain View for future development of a neighborhood park. These aspects of the project would further City of Mountain View policies for parks and other recreational facilities and help meet the demand from other anticipated development in the area.

Anticipated residential projects in the Mountain View city limits would be subject to the City's standard requirements for parkland dedication or in-lieu payment of fees to fund parks and recreational facilities. The future neighborhood park to be developed by the City of Mountain View would help meet park demands in the area.

In addition, the 2014 EIR on the San Antonio Precise Plan (which encompasses the project site and surrounding areas), the 2022 EIR Addendum on San Antonio Precise Plan amendments for The Village at San Antonio-Phase III project (a proposed development in the project site vicinity), and the 2022 EIR on the citywide Mountain View Housing Element update all concluded that anticipated population increases and other cumulative growth would not be expected to result in a significant impact on recreational facilities (LSA Associates, Inc., 2014; ICF, 2022; City of Mountain View, 2022).

For these reasons, the effect of the project on recreational facilities, in combination with other past, present, and foreseeable projects, can be considered less than significant. The project would not result in or contribute to any significant cumulative impacts on recreational facilities.

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# 4.14 TRANSPORTATION

## INTRODUCTION

This section describes transportation conditions and regulatory context in the vicinity of the project site. The analysis includes an evaluation of project impacts on the transportation network, including vehicle traffic, transit use, bicycle circulation, and pedestrian circulation, and the need for mitigation measures to reduce or eliminate any potentially significant impacts.

Information in this section is based on the Multimodal Transportation Analysis (MTA) prepared by Parisi Transportation Consulting for the project (Parisi Transportation Consulting, 2024). The project MTA was conducted according to the City of Mountain View Multimodal Transportation Analysis Handbook, and the Santa Clara Valley Transportation Authority (VTA) *Transportation Impact Assessment Guidelines*, and also provides an analysis of transportation aspects beyond the purview of the California Environmental Quality Act (CEQA).

## ENVIRONMENTAL SETTING

The project site is bounded by California Street to the north, Showers Drive to the east, the San Francisco Public Utilities Commission (SFPUC) Parcel to the south, and Pacchetti Way to the west. The project site is within the plan area of the City of Mountain View's San Antonio Precise Plan. The plan area is bordered by the Central Expressway to the north, Ortega Avenue to the east, El Camino Real to the south, and Del Monte Avenue to the west. A description of the existing setting for transportation and circulation in the vicinity of the project site is included below.

### Roadway Network

Local vehicular access to the project site is provided by Pacchetti Way, California Street, and Showers Drive. These roadways are described below along with the number of vehicle travel lanes, on-street parking, sidewalks, bicycle facilities, and other characteristics.

*Pacchetti Way* is a two-lane north-south roadway with a posted speed limit of 15 miles per hour that extends from El Camino Real along the southern border of the San Antonio Precise Plan area northward and terminates at the intersection of Showers Drive in front of the San Antonio Caltrain Station. Along the project site frontage, sidewalks are present on both sides of the street and street parking is prohibited. Pacchetti Way serves as a Class III bicycle route between the project site and the Caltrain station.

*California Street* is a four-lane east-west roadway with a posted speed limit of 35 miles per hour that extends from Del Medio Avenue in the east to Bush Street in the west. California Street runs along the north side of the project site, where the street contains a landscaped median near Pacchetti Way and a center left-turn lane near Showers Drive. California Street contains sidewalks and Class II bicycle lanes on both sides of the roadway and is parking-restricted at all times.

*Showers Drive* is a four-lane north-south roadway with a posted speed limit of 35 miles per hour that extends from El Camino Real in the south to north of California Street, where it curves westward in front of the San Antonio Caltrain Station. Showers Drive, which runs along the east and contains a center left-turn lane, contains sidewalks and Class II bicycle lanes on both sides of the roadway. It is parking-restricted at all times.

## Pedestrian Facilities

Sidewalks are present along both sides of the roadways in the project site vicinity. Sidewalks are generally 5 to 6 feet wide, and many sidewalks have a landscaping strip separating the sidewalk from the roadway. The intersections of California Street at Pacchetti Way and California Street at Showers Drive have signalized crosswalks with pedestrian push buttons at all legs. The existing sidewalk network provides access from the project site to nearby bus stops and the Caltrain station.

AccessMV, the City of Mountain View's comprehensive modal transportation plan, defines Pedestrian Quality of Service (PQOS) for City walkways on a scale from 1 to 5, with 1 being the best quality and 5 being the lowest. AccessMV includes existing PQOS according to the adopted methodology for all City sidewalks, and accounts for factors such as sidewalk quality, adjacent vehicle speed limits, proximity to destinations, and road type. The existing PQOS along the project site roadway frontages is PQOS 5 along California Street and PQOS 4 along Showers Drive, reflecting high adjacent posted speed limits along these roadways that affect the comfort level of pedestrians traversing these roadways. Pacchetti Way is not assigned a PQOS in AccessMV.

## Bicycle Facilities

Bicycle facilities that exist near the project site include striped bicycle lanes (Class II bikeway) and shared bicycle routes (Class III bikeway). Bicycle lanes are on-street bicycle facilities designated using stripes and stencils. Bicycle routes are streets assigned for bicycle travel and shared with motor vehicles, designated with "sharrow" pavement markings.

Within the project site vicinity, bicycle lanes are available on the full lengths of California Street and Showers Drive. Pacchetti Way also serves as a bicycle route. Under California law, bicyclists are allowed to travel along all roadways unless posted otherwise. Therefore, most roadways are available for use by bicyclists regardless of whether bicycle facilities have been installed.

Bicycle Level of Traffic Stress (LTS) was assessed for the roadway network in Mountain View as part of AccessMV. Bicycle LTS refers to a bicyclist's perceived comfort and safety of bicycle facilities based on various factors on a range of 1 to 4, with LTS 1 indicating the lowest LTS and LTS 4 indicating the highest LTS. Under existing conditions, California Street and Showers Drive are identified as LTS 3, indicating that these facilities would accommodate confident adult bicyclists, but not bicyclists of all ages and abilities.

## Transit Facilities

The project site vicinity is served by a variety of public transit operations. The Caltrain commuter rail service is operated by the Peninsula Joint Powers Board. Bus and light rail services in Mountain View are operated by the VTA. The Mountain View Community Shuttle is operated jointly by the City of Mountain View and the private company Google. The Stanford Marguerite Shuttle is operated by Stanford University.

The project is located 0.33 mile south of the San Antonio Caltrain Station at the intersection of Pacchetti Way and Showers Drive. Trains operate between San Francisco and Gilroy with a service frequency of approximately 30 minutes during peak hours and 60 minutes on weekends. The walking route between the project site and the Caltrain station includes continuous sidewalk and a signalized crossing at California Street.

The project site is located 0.15 mile from the VTA transfer center at Showers Drive and Latham Street. This center includes bus stops for Routes 21 and 40. Route 21 runs from the Stanford Shopping Center to the Santa Clara Transit Center, and Route 40 runs from Foothill College to the Mountain View Caltrain Station. Both routes operate with a service frequency of every 30 minutes during weekdays from 6:00 AM to 8:00 PM, and hourly on weekends. The walking route between the project site and the VTA transfer center is along a continuous sidewalk adjacent to Showers Drive.

The VTA bus stop for the rapid 522 bus that runs along El Camino Real between the Palo Alto Transit Center and the San Jose Eastridge Transit Center is located 0.3 mile from the project site near the intersection of El Camino Real and Showers Drive. This stop provides service frequency of approximately 15 minutes during weekday peak hours and 20 minutes on weekends.

The Mountain View Community Shuttle also stops at the VTA transfer center and provides service to downtown Mountain View and Stanford University. Shuttles run on weekdays with service frequency of every 30 minutes from 7:00 AM to 7:00 PM, and hourly on weekends from 10:00 AM to 6:00 PM.

The Stanford Marguerite Shuttle service also stops at the VTA transfer center and provides hourly service to Stanford University on Friday afternoons and evenings, Saturday, and Sunday.

## REGULATORY FRAMEWORK

### State Regulations

*CEQA Statute and Guidelines*

Senate Bill (SB) 743, which was signed into law in 2013, mandated a change in the CEQA Guidelines to use vehicle miles traveled (VMT) as opposed to vehicle flow or traffic congestion as a more appropriate metric for assessing impacts associated with projects, in line with goals of helping to achieve climate commitments, improving health and safety, and prioritizing co-located land uses. After the California Governor's Office of Planning and Research issued the updated Technical Advisory on Evaluating Transportation Impacts in CEQA in 2018, CEQA analysis that met this framework became mandatory on July 1, 2020, for proposed land use projects.

## Regional Policies

*Metropolitan Transportation Commission (MTC) Plan Bay Area 2050 (2021)*

Plan Bay Area 2050 was adopted in October 2021 as an update to Plan Bay Area 2040 and serves as the official long-range plan for transportation as well as housing, economy, and the environment in the nine-county Bay Area region. Plan Bay Area provides a road map for accommodating projected population and employment growth in the region and associated transportation infrastructure and investment.

*Santa Clara County Congestion Management Program (CMP)*

The VTA is the congestion management agency for Santa Clara County and develops and updates its mandated short-range Congestion Management Program (CMP) every two years to describe strategies to assess and monitor the performance of the county's transportation system, address congestion, and improve the performance of a multimodal system among local jurisdictions. The City of Mountain View MTA Handbook describes where and how CMP requirements apply for transportation analyses. A CMP analysis is required if a project generates over 100 peak hour vehicle trips. An MTA conducted according to the City of Mountain View MTA Handbook conforms with CMP requirements.

A CMP analysis would determine potential project impacts on roadway segments designated as part of the designated CMP network. In context of this project, relevant CMP roadways and intersections under the CMP network include the Central Expressway, El Camino Real, and the intersection of San Antonio Road and El Camino Real.

## Local Policies and Plans

*City of Mountain View General Plan (2012)*

The Mountain View 2030 General Plan was adopted in 2012. The City of Mountain View establishes a local framework for transportation, mobility, and land use in the Mountain View 2030 General Plan. The project site vicinity is identified as a Mixed-Use Center within the San Antonio Change Area.

The General Plan emphasizes land use and transportation network coordination, access to services, and a transportation network that addresses climate change by reducing emissions associated with vehicle travel, accommodates all travel modes, and manages vehicle travel demand.

As the project site is located within the San Antonio Precise Plan area, specific land use and mobility policies adopted for the purpose of avoiding or mitigating an environmental impact as related to the transportation network are referenced in the next section.

*San Antonio Precise Plan (2014)*

The San Antonio Precise Plan was developed by the City of Mountain View to translate goals and policies from the 2030 General Plan to the specific context of the San Antonio area, in which the project site is located. The San Antonio Precise Plan was adopted in December 2014 and includes development standards and policies addressing circulation, urban form, land use, and parking. The San Antonio Precise Plan emphasizes complete streets and multimodal access on the circulation network, and urban form that is well-proportioned and inviting to people walking and biking.

The San Antonio area is characterized by mixed-use subareas with convenient access to the San Antonio Caltrain Station. The San Antonio Precise Plan provides direction for a more integrated neighborhood.

San Antonio Precise Plan policies that relate to the transportation and circulation network in the context of the project include the following:

Policy CIRC-1.2: Implement an integrated network of publicly accessible complete streets, balancing vehicle access needs with required improvements for pedestrians and bicyclists to improve the circulation system.

Policy CIRC-1.4: Break up large blocks with new and improved streets and pedestrian/bicycle-only connections to allow a variety of comfortable routes for pedestrians and bicyclists.

Policy CIRC-1.5: Provide pedestrian facilities on all internal streets and connections.

Policy CIRC-1.7: Identify traffic-calming opportunities to limit cut-through traffic on neighborhood streets and create comfortable shared roadways for bicycles and vehicles.

Policy CIRC-2.1: Prioritize pedestrian and bicycle connections to provide efficient access to transit stations and open space areas, between commercial destinations, and in active frontage locations.

Policy PTDM-1.1: Provide consolidated, centralized underground garages and/or parking structures to facilitate a “park once” experience in the Mixed-Use Center subarea.

Policy PTDM-1.5: Improve and coordinate connections through parking areas and with the overall circulation plan.

Policy PTDM-1.7: Locate and design parking areas efficiently and consider the building uses, shared parking options, access to transit services, and tenant space size.

Policy PTDM-1.8: Allow parking regulations to make parking requirements consistent with parking demand.

Policy PTDM-1.9: Monitor parking standards and programs and adjust as needed over time to address any neighborhood impacts.

Policy PTDM-2.1: Provide convenient, secure and accessible bicycle parking.

Policy PTDM-2.2: Develop and implement transportation management standards and programs through new development to improve transit use and reduce private vehicle trips, such as transportation demand management programs and transportation management associations.

Policy PTDM-2.3: Encourage increased transit ridership and access through building design; pedestrian and bicycle access improvements; enhanced transit station amenities; and transit incentives provided by individual development projects.

Policy PTDM-2.4: Leverage trip reduction measures with the Plan's proposed multimodal improvements and transit-accessibility.

*AccessMV: Comprehensive Modal Plan (2021)*

This plan builds off former City plans addressing bicycle and pedestrian facilities to provide a comprehensive framework for encouraging travel by active transportation and facility improvement. AccessMV includes recommendations for supporting infrastructure such as bike parking, wayfinding, and pedestrian-friendly streetscapes, as well as recommendations for bicycle encouragement and safe routes to school programs.

AccessMV identifies planned pedestrian and bicycle facilities in the vicinity of the project, including a shared-use path along the SFPUC Parcel from San Antonio Road to Ortega Avenue, and separated bikeways along Pacchetti Way from the SFPUC Parcel to Showers Drive, California Street from San Antonio Road to Shoreline Boulevard, and Showers Drive from Pacchetti Way to El Camino Real.

*Mountain View Vision Zero Policy (2019)*

The Mountain View City Council adopted a Vision Zero Policy in December 2019 to eliminate fatal traffic collisions in Mountain View by 2030. Vision Zero integrates applicable transportation plans, policies, and procedures under the framing that fatal collisions are preventable and the goal of zero fatal collisions can inform practical safety improvement strategies and tactics.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Significance Criteria

The California Governor's Office of Planning and Research has published guidelines for agencies to establish CEQA thresholds for significance and VMT screening thresholds that the agency uses in the determination of the significance of environmental impacts. Accordingly, the City of Mountain View incorporates this guidance, and includes the following significance criteria, screening criteria, and thresholds of significance in its MTA Handbook.

The project would have a significant effect on the environment if it would:

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths;

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3 (Subdivision (b)(1)) regarding VMT;

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or

d) Result in inadequate emergency access.

*VMT Screening Criteria*

VMT screening thresholds help to identify projects expected to cause a less-than-significant impact. If projects meet any of the City of Mountain View's four screening criteria, they are "screened-out"; it is presumed that their VMT impacts would be less than significant, and a detailed VMT analysis is not required for transportation CEQA analysis purposes.

Projects are presumed to have a less-than-significant transportation impact if they meet any of the following screening criteria:

- Small Project Screening
- Map-Based Screening
- Transit Screening
- Affordable Housing Screening

These screening criteria are described in more detail below.

*VMT Thresholds of Significance*

If a project is not "screened-out" and a detailed VMT analysis is required, the project must be compared to the following transportation impact thresholds of significance:

- The nine-county Bay Area regional reference average VMT baseline and a 15 percent threshold of significance for both residential and office projects.
- Retail projects that would result in a net increase in total VMT would have a significant VMT impact; however, retail projects determined by the City of Mountain View to be local serving are presumed to have a less-than-significant impact on VMT. Retail projects larger than 50,000 square feet may be considered regional-serving and would be subject to the retail threshold of significance.
- Each land use within a mixed-use project, and all other project types, must be evaluated independently by applying the most appropriate threshold of significance to each land use type being proposed.

The transportation analysis for this Environmental Impact Report (EIR) does not include a detailed VMT analysis or comparison of VMT against these thresholds of significance, since the project meets City of Mountain View CEQA screening criteria and would result in a net VMT decrease as discussed below.

*Consistency with Plans and Policies*

Transportation aspects of land use projects are shaped by adopted plans and policies at various levels of government and agencies. This analysis compared the proposed project elements against local plans and policies that aim to minimize potential environmental impact.

### Less-than-Significant Impacts

*Conflicts with Programs, Plans, Ordinances, or Policies Addressing the Circulation System*

*The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths.*

The project would comply with the following relevant provisions and therefore would have a less-than-significant impact in relation to this significance criterion.

<u>CEQA Statute and Guidelines</u>

The project would comply with the CEQA Statute and OPR Technical Advisory by following the City of Mountain View's MTA Handbook, which incorporates VMT screening criteria and thresholds of significance in alignment with the SB 743 mandate.

<u>Santa Clara County Congestion Management Program (CMP)</u>

The project would comply with VTA CMP requirements because an MTA was conducted in accordance with City of Mountain View guidelines listed in the MTA Handbook.

<u>City of Mountain View General Plan (2012)</u>

The project would reduce vehicle trips, as described below, leading to decrease in overall VMT and resulting in a reduction of emissions associated with vehicle travel. The project would replace commercial buildings and an impervious asphalt parking lot with school buildings, sports fields, and future parkland while providing access to pedestrian and bicycle facilities, which would result in increased travel mode access to various services and destinations. As such, the project is aligned with the land use and mobility principles outlined in the General Plan.

<u>San Antonio Precise Plan (2014)</u>

The project plans include landscape and pedestrian improvements along Pacchetti Way, and the project would develop a sidewalk within the project site property line adjacent to the SFPUC Parcel, which would enable public pedestrian access in accordance with the San Antonio Precise Plan pedestrian circulation plan.

The project elements of circulation and parking management are in line with plan policies, and the project would not present a conflict with the San Antonio Precise Plan.

<u>AccessMV: Comprehensive Modal Plan (2021)</u>

The project would provide direct access to the project site from the future pedestrian and bicycle facilities along the SFPUC Parcel and Pacchetti Way. The project would construct a sidewalk within the project site property line along the SFPUC Parcel. Bicycle parking for students, staff, and visitors would be located on the blacktop, accessible from the network access points without crossing any vehicle travel paths on the project site.

Project plans are in accordance with the goals and policies set forth in AccessMV.

*Consistency with CEQA Guidelines Section 15064.3 (Subdivision (b)(1)) Regarding VMT*

*The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3 (Subdivision (b)(1)) regarding VMT.*

The project would be consistent with this CEQA Guidelines provision and would have a less-than-significant impact in relation to this significance criterion. The project would result in a net overall decrease in VMT. The VMT analysis is described in detail below.

Project Trip Generation

Vehicle trips generated by the project were estimated using the Institute for Transportation Engineers (ITE) Trip Generation Manual, 11th Edition along with additional trip reductions. Trip generation was estimated for three time periods:

- AM Peak Hour: the school drop-off period, which would also correspond with the typical peak traffic hour of adjacent roadways between 7:00 AM and 9:00 AM;
- Afterschool Peak Hour: the school pick-up period accounting for the 30 minutes before and after student release time, reflecting the hour between 2:30 PM and 3:30 PM; and
- PM Peak Hour: the peak traffic hour of adjacent roadways between 4:00 PM and 6:00 PM.

As the project may serve a range of grades and student populations over time, the analysis compared trip generation rates for various types of school facilities currently housed within existing LASD facilities, including elementary schools, middle/junior high schools, and K-8 schools. Of these types, certain elementary schools exhibit the highest peak hour trip generation rates, and these rates are conservatively applied for this analysis in order to estimate a highest potential trip generation scenario for the project. This analysis assumes a maximum future enrollment of 900 students.

The Santa Clara County VTA Transportation Impact Analysis Guidelines provide vehicle trip reduction factors that were applied to the project. Employee vehicle trips were reduced by 6 percent due to the project's proximity to a Caltrain station. Student vehicle trips were reduced by a factor that accounts for the difference between the percentage of Santa Clara elementary and middle school students that walk or bike to school (32 percent) compared to the national average (11 percent).

Vehicle trips currently generated by students residing north of the project site and currently assigned to Covington Elementary School and Santa Rita Elementary School represent existing vehicle trips on the roadway network adjacent to the project. As these vehicle trips would be re-assigned to the project school, these trips are subtracted from the project trip generation.

Vehicle trips associated with the existing uses on the project site are subtracted from total project-related trips to determine the net new trips generated by the project. Existing vehicle trips generated by existing site uses were estimated by applying ITE trip generation rates for a Mid-sized Shopping Plaza containing between 40,000 and 150,000 square feet of gross leasable area (GLA) (ITE Land Use Code 821). The existing buildings have a total GLA of approximately 137,000 square feet, and trips generated by full permitted use associated with the site as a shopping plaza are subtracted from project-related trips to determine net new trips generated by the project.

Trip generation estimates are summarized below in **Table 4.14-1**. The project would result in a net reduction of 8,259 daily vehicle trips with a net increase of 285 new AM peak hour vehicle trips, a net decrease of 132 vehicle trips during the Afterschool peak hour, and a net decrease of 642 PM peak hour vehicle trips. These results reflect high project trip generation during the AM and Afterschool peak hours, contrasted with existing, high shopping vehicle trips from midday to the evening.

**TABLE 4.14-1 OVERALL PROJECT VEHICLE TRIP GENERATION RESULTS**

| Scenario | Daily Total | AM Peak Hour Vehicle Trips | | | Afterschool Peak Hour Vehicle Trips | | | PM Peak Hour Vehicle Trips | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | In | Out | Total | In | Out | Total | In | Out |
| **Proposed Project** | | | | | | | | | | |
| Project School, 900 students | 2,043 | 909 | 482 | 427 | 613 | 300 | 313 | 144 | 50 | 94 |
| **Trip Reductions** | | | | | | | | | | |
| Proximity to Caltrain Station (6% of employee trips)[a] | (13) | (6) | (3) | (3) | (4) | (2) | (2) | (1) | 0 | (1) |
| Student Travel Mode (21% of student trips)[b] | (382) | (170) | (90) | (80) | (115) | (56) | (58) | (27) | (9) | (18) |
| Re-Assigned Trips from Nearby Residences (32% of student trips)[c] | (646) | (211) | (110) | (101) | (128) | (63) | (65) | (46) | (21) | (25) |
| Total Project Vehicle Trips | 1,002 | 522 | 279 | 243 | 366 | 179 | 188 | 70 | 20 | 50 |
| **Existing Use (All Permitted Uses)** | | | | | | | | | | |
| Shopping Center 137,940 square feet | (9,261) | (237) | (147) | (90) | (498) | (244) | (254) | (712) | (349) | (363) |
| **Net Project Vehicle Trips** | **(8,259)** | **285** | **132** | **153** | **(132)** | **(65)** | **(66)** | **(642)** | **(329)** | **(313)** |

[a] A 6% reduction for employee trips applies for projects within a 2,000-foot walk of a Caltrain station, in accordance with the VTA *Transportation Impact Assessment Guidelines*. The project site is a ~1,700-foot walk from the San Antonio Caltrain Station.
[b] A 21% reduction for student trips applies to account for the difference between the percentage of Santa Clara elementary and middle school students that walk or bike to school (32%) compared to the national average (11%).
[c] Vehicle trips that are currently associated with student travel from neighborhoods north of the project site to Covington and Santa Rita Elementary Schools would be re-assigned to the project school; these trips are subtracted from the project trip generation counts as they are already existing, and not generated by the project.
Source: Parisi Transportation Consulting, 2024.

Vehicle Miles Traveled Screening

A land use project needs to meet only one of the VMT screening criteria listed in the City of Mountain View MTA Handbook to determine that the project would result in a less-than-significant impact. The results of the VMT screening assessment are displayed in **Table 4.14-2**, and associated descriptions for each screening criteria result are included in this section.

**TABLE 4.14-2 VEHICLE MILES TRAVELED (VMT) SCREENING ANALYSIS RESULTS**

| Screening Criteria | Screening Criteria Description | Screening Criteria Met? |
|---|---|---|
| Small Project | Project generates less than 110 daily vehicle trips | No |
| Map-Based | Project is located within a low-VMT area | No |
| Near Transit Station | Project is located within 0.5-mile of major transit stop | Yes |
| Affordable Housing | Projects with 100 percent affordable housing | (Not Applicable) |

Source: Parisi Transportation Consulting, 2024.

Small Project VMT Screening. Projects that generate fewer than 110 vehicle trips per day generally may be assumed to cause a less-than-significant transportation impact.

As per guidance in the MTA Handbook for projects that are redeveloping occupied sites, when assessing motor vehicle operations, trips associated with the existing site are subtracted from total project-generated trips to determine the net change in trips that the project generates. However, the Small Project VMT Screening criteria compares total project-generated trips to the 110-vehicle trip screening threshold, without subtracting trips associated with the existing site use.

The project itself would generate a total of 1,002 daily vehicle trips, not accounting for the reduction of vehicle trips associated with the existing site.

As the project would generate more than 110 net vehicle trips, the project does not meet the small project screening criteria.

Map-Based VMT Screening. Projects located in an area with low VMT as determined by comparison to the thresholds of significance and incorporating similar characteristics of land use and compatibility with the existing built environment, and not leading to residential displacement, can be presumed to cause a less-than-significant transportation impact. The City has provided heat maps of VMT per capita and VMT per employee to assist with this screening process.

For map-based screening purposes, the project analysis applies to the employment aspect of the future school, and VMT per worker is used for screening. Comparison with the thresholds of significance is made based on countywide data available from the VTA. Average daily VMT per employee for the Bay Area region and the proposed project is included in **Table 4.14-3** below.

**TABLE 4.14-3 RESULTS FOR LOW-VEHICLE MILES TRAVELED (VMT) AREA SCREENING CRITERIA**

| | VMT/Employee | | |
|---|---|---|---|
| Project Location | Regional Average | Threshold of Significance | Project Site |
| San Antonio Shopping Center, Mountain View | 15.33 | 13.03 | 15.5 |

Source: Parisi Transportation Consulting, 2024.

The average daily VMT per worker at the project site is 15.5 miles, which is above the threshold of significance (15 percent below the regional average) of 13 miles. As such, the project does not meet screening criteria based on location within a low-VMT area.

Near Transit Station VMT Screening. Projects proposed within 0.5 mile of an existing major transit stop or existing stop along a high-quality transit corridor are presumed to have a less-than-significant impact on VMT. The 2021 CEQA Statute defines a major transit stop as containing any of the following:

a) An existing rail or bus rapid transit (BRT) station.

b) A ferry terminal served by either a bus or rail transit service.

c) The intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

The project site is located within 0.35 mile of the San Antonio Caltrain Station near the intersection of Showers Drive and Pacchetti Way.

City guidelines require determination that a less-than-significant impact presumption for projects near transit stations is valid by comparison against other potential VMT generating indicators. A project described by any of the indicators in **Table 4.14-4** may have potential to generate significant levels of VMT. As shown in Table 4.14-4, the project would not exhibit these VMT generating indicators.

**TABLE 4.14-4 VEHICLE MILES TRAVELED (VMT) GENERATING INDICATORS FOR NEAR MAJOR TRANSIT STOP VMT SCREEN**

| VMT Generating Indicator | Conclusion | Project Exhibits Indicator? |
|---|---|---|
| Project has a Floor Area Ratio (FAR) less than 0.75 | This analysis concludes that FAR is not an effective VMT generating indicator for this project. | (Not Applicable) |
| Project includes more parking than required[a] | The project proposes 51 parking spaces, and hence does not include more parking than required. | No |
| Project is inconsistent with Sustainable Communities Strategy[b] | The project would provide a school in a potential priority development area and therefore would be consistent with the Sustainable Communities Strategy. | No |
| Replaces affordable housing with a smaller number of moderate- or high-income residential units | There is no existing residential use on the project site. | No |

[a] According to Mountain View Municipal Code Chapter 36, Article X, Division 3, Section 36.32.50, the number of vehicle parking spaces required for schools is subject to a parking study.
[b] As included in *Plan Bay Area 2040*, Metropolitan Transportation Commission and Association of Bay Area Governments, *Regional Transportation Plan and Sustainable Communities Strategy for the San Francisco Bay Area 2013-2040*. Adopted July 18, 2013.
Source: Parisi Transportation Consulting, 2024.

The FAR indicator seeks to ensure that projects do not induce increased vehicle travel patterns through excessive parking allocation.[1] The project plans call for educational and productive program use of athletic fields, playgrounds, and other common areas in addition to buildings, while the parking lot represents approximately 5 percent of the campus land. Given typical association of

[1] A more useful application of this indicator may be to remove educational use areas such as athletic fields, playgrounds, etc. from the lot size denominator for determination of parcel area, or to include these educational use areas in the numerator in calculation of an “effective” FAR. This latter approach yields an “effective” FAR of 0.80.

FAR with residential or commercial developments, this analysis concludes that FAR as a VMT generating indicator is not appropriate for project screening purposes.

As the project is located within 0.5 mile of a major transit stop and would provide multimodal transportation access and opportunity to reduce staff VMT, the project meets the near transit station screening criteria.

Affordable Housing VMT Screening. Projects with 100 percent affordable housing are considered to have a less-than-significant impact on VMT. As the project does not contain affordable housing, this screening criterion is not applicable to the project.

VMT Screening Results Summary. The project meets the small project screening criteria based on net trips generated (accounting for existing land use), and the near transit station screening criteria. As the project would result in a net overall decrease in VMT, this conclusion is consistent with OPR guidance that projects of this type have a less-than-significant transportation impact.

As described in the trip generation section above, the project would result in a net daily reduction of 8,259 vehicle trips, or an 89% reduction in daily vehicle trips compared to current vehicle trips generated by the existing shopping plaza. Guidance in the MTA Handbook suggests that retail centers larger than 50,000 square feet are considered regional-serving that generate long average trip lengths, compared to public schools such as the project, which would serve local population and "generate relatively short trips, primarily local trips, and does not generate substantial VMT." As the project would greatly reduce overall vehicle trips and shorten average trip length, it follows that the project would result in net reduction in VMT compared to existing conditions.

California CEQA Guidelines Section 15064.3 (Subdivision (b)(1)) states that "projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact."[1] The OPR Technical Advisory on Evaluating Transportation Impacts in CEQA states that "Where a project replaces existing VMT-generating land uses, if the replacement leads to a net overall decrease in VMT, the project would lead to a less-than-significant transportation impact."

*As the project would result in a decrease in vehicle miles traveled compared to existing conditions, the conclusion that the project would result in a less-than-significant transportation impact is consistent with CEQA and OPR guidelines.*

*Geometric Design Hazards*

*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).*

The project does not include off-site transportation network design alterations that may potentially increase sharp curves or other geometric hazards. Landscaping on Pacchetti Way near the site driveway would be retained, resulting in sight lines and visibility similar to the existing arrangement.

After construction is complete, the project would generate vehicle trips consisting of passenger vehicles, school buses, and delivery vehicles, in addition to trips made by foot or bicycle. The project would be close to other operating schools and land uses that generate similar transportation mode travel on the roadway network. Therefore, the project would not introduce or present an incompatible vehicle type or transportation mode on the roadway network.

During drop-off and pick-up periods, student and staff pedestrian and bicycle traffic would enter the campus from the planned pathway adjoining the SFPUC Parcel, separate from the vehicle drop-off area. This arrangement would minimize potential hazards due to conflicts between vehicles and people walking or biking.

As the project would not be incompatible with surrounding land uses, would not include off-site road geometric design alterations, and would not create circulation hazards, the project's impact in relation to this criterion would be less than significant.

*Emergency Access*

*The project would not result in inadequate emergency access.*

Emergency access requirements applicable to the project are included in the Mountain View Fire Code, which adopts the California Fire Code with amendments. The project would be designed in accordance with all applicable California Department of Education design standards for emergency access within the site, including the internal drive aisle that serves the site during drop-off and pick-up entering from Pacchetti Way and exiting onto California Street. Requirements such as fire apparatus access to the project site and minimum lane width of the internal on-site drive aisles to allow for passing of emergency vehicles would be satisfied by the proposed project. These aspects, along with a fire safety plan, would be reviewed and approved by the Mountain View Fire Department. Potential impacts on roadway emergency access during construction would be addressed through the construction traffic control plan and reviewed and approved by appropriate City of Mountain View departments.

As adequate emergency access is required as part of the City regulations and project plans would be reviewed by local fire officials as part of design review, the project would have a less-than-significant impact with respect to emergency access.

## Potentially Significant Impacts

This analysis concludes that the project would not result in any potentially significant transportation impacts.

## Cumulative Impacts

The OPR Technical Advisory (OPR, 2018) describes technical considerations in assessing cumulative VMT impacts accounting for the project's influence in context of effects of other past, present, and future developments. If a project's transportation impact analysis determines that a project meets VMT screening criteria or that a VMT efficiency metric such as VMT per resident falls below the threshold of significance, and if the project is aligned with long-term environmental goals, it should be concluded that the project "would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact (page 6)." This analysis determines that the project meets City of Mountain View VMT screening criteria and would result in a less-than-significant impact, which would lead to a reduction in greenhouse gas emissions and would be aligned with long-term environmental goals. Hence, the cumulative VMT impacts of the project would be less than significant.

## REFERENCES

California Governor's Office of Planning and Research, 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA.

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# 4.15 TRIBAL CULTURAL RESOURCES

## INTRODUCTION

This section of the Draft Environmental Impact Report (EIR) describes the potential impacts of the project on tribal cultural resources. Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe. The California Environmental Quality Act (CEQA) requires that agencies considering projects that are subject to discretionary action consider the potential impacts on tribal cultural resources that may occur from project implementation (see Section 21084.2 and Appendix G of the CEQA Guidelines).

This section describes existing tribal cultural resources conditions at the project site and the pertinent state and City of Mountain View laws and regulations related to cultural resources.[1] Potentially significant adverse impacts that could result from project implementation are described, and mitigation measures to reduce these impacts to less-than-significant levels are identified, as appropriate.

## ENVIRONMENTAL SETTING

### Local Native American Community

As described under *Ethnography* in *Section 4.4, Cultural Resources*, of this EIR, the project site vicinity was home to the Puichon Ohlone prior to the arrival of the Spanish in the region. There are a number of established Ohlone groups in the Bay Area, particularly in the South Bay and project site vicinity. All qualify as California Native American tribes; none of the local tribes is federally recognized. Tribes identified by the Native American Heritage Commission (NAHC) as having a traditional and cultural affiliation with the project site vicinity are listed in **Table 4.15-1**.

### Native American Coordination

On July 12, 2022, the Los Altos School District (LASD) made an email request to the NAHC for review of NAHC files for the presence of recorded sacred sites on or near the project site. The NAHC responded on August 8, 2022, stating that a file search indicated that significant resources are located in the vicinity of the project site. The NAHC also provided a list of nine tribes with a traditional and cultural affiliation with the project site vicinity and recommended that LASD contact the tribes for more information about important tribal resources that could be affected by the project.

[1] As allowed by state law, the Los Altos School District (LASD) has adopted a resolution exempting itself from local City of Mountain View regulations.

**TABLE 4.15-1 NATIVE AMERICAN ORGANIZATIONS/TRIBES**

| Organization/Tribe | Name of Contact | Letter Date | Response/Comments |
|---|---|---|---|
| Amah Mutsun Tribal Band | Valentin Lopez, Chairperson | 08/24/2022 | No response to date |
| Amah Mutsun Tribal Band of Mission San Juan Bautista | Irene Zwierlein, Chairperson | 08/24/2022 | No response to date |
| Indian Canyon Mutsun Band of Costanoan | Ann Marie Sayers, Chairperson | 08/24/2022 | No response to date |
| Indian Canyon Mutsun Band of Costanoan | Kanyon Sayers-Roods, MLD[1] Contact | 08/24/2022 | No response to date |
| Muwekma Ohlone Indian Tribe of the San Francisco Bay Area | Charlene Nijmeh, Chairperson | 08/24/2022 | No response, to date |
| Muwekma Ohlone Indian Tribe of the San Francisco Bay Area | Monica Arellano, Vice Chairwoman | 08/24/2022 | No response to date |
| Ohlone Indian Tribe | Andrew Galvin | 08/24/2022 | No response to date |
| Tamien Nation | Quirina Luna Geary, Chairperson | 08/24/2022 | No response to date |
| Wuksache Indian Tribe/Eshom Valley Band | Kenneth Woodrow, Chairperson | 08/24/2022 | No response to date |

Note: MLD = most likely descendent
Source: List of contacts provided by the NAHC via emailed letter dated August 8, 2022.

At the time of the project's CEQA Notice of Preparation (NOP), no tribes had formally requested that LASD notify them, pursuant to Public Resources Code Section 21080.3.1(b)(1), about projects proposed by LASD. LASD, however, contacted all of the tribes listed by the NAHC via U.S. certified mail with a return receipt. Letters, mailed on August 24 2022, described the project, provided the results of the NWIC record search and the NAHC sacred lands search, and provided each tribe the opportunity to consult on the project. Table 4.15-1 lists all those contacted. Follow-up emails were sent to each contact on September 8, 2022. As of the date of preparation of this EIR section, LASD has not received any requests for consultation on the project from those contacted.

## Archival Research

The discussion under *Archival Research* in *Section 4.4, Cultural Resources*, of this EIR, describes the results of the records search conducted by the Northwest Information Center of the California Historical Resources Information System, as well as research of other archived or online references. Sources of information reviewed included, but were not limited to, the current listings of properties on the National Register of Historic Places, California Historical Landmarks, California Register of Historical Resources, California Points of Historical Interest as listed in the Office of Historic Preservation's (OHP's) Historic Property Directory, the Built Environment Resource Directory for Santa Clara County available at the OHP website, and the City of Mountain View Register of Historic Resources. None of these references identified the presence of tribal cultural resources in the vicinity of the project site.

## REGULATORY FRAMEWORK

### State Regulations

Public Resources Code Section 21080.3.1, commonly referred to as Assembly Bill 52, requires that CEQA lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if requested by the tribe and if the agency intends to release a negative declaration, mitigated negative declaration, or environmental impact report for a project. The bill also specifies, under Public Resources Code Section 21084.2, that a project with an effect that may cause substantial adverse change in the significance of a tribal cultural resource is considered a project that may have a significant effect on the environment.

As defined in Public Resources Code Section 21074(a), tribal cultural resources are:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

   a. Included or determined to be eligible for inclusion in the California Register of Historical Resources; or

   b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Tribal cultural resources are further defined under Section 21074(b) and (c) as follows:

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms to the criteria of subdivision (a).

Mitigation measures for tribal cultural resources must be developed in consultation with the affected California Native American tribe pursuant to the newly chaptered Section 21080.3.2 or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of tribal cultural resources, and treatment of tribal cultural resources with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

### Local Regulations and Policies

As noted under *Local Regulations and Policies* in *Section 4.4, Cultural Resources,* of this EIR, the City of Mountain View 2030 General Plan contains a number of policies related to cultural resources and historic preservation. None specifically addresses tribal cultural resources; however, some Native American archaeological sites and all Native American human remains are generally considered tribal cultural resources. Therefore, the following two policies listed under Goal LUD-11 ("Preserved and protected important historic and cultural resources") in Chapter 3, Land Use and Design, of the City of Mountain View 2030 General Plan (City of Mountain View, 2012) would apply:

Policy LUD 11.5: *Archaeological and paleontological site protection.* Require all new development to meet state codes regarding the identification and protection of archaeological and paleontological deposits.

Policy LUD 11.6: *Human remains.* Require all new development to meet state codes regarding the identification and protection of human remains

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Significance Criteria

For the purposes of this Draft EIR and based on Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on tribal cultural resources if it would:

> 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:
>
> i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k);
>
> ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

### Less-than-Significant Impacts

*The project would not cause a substantial adverse change in the significance of a previously listed or otherwise known tribal cultural resource.*

There are no known tribal cultural resources 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). Therefore, there would be no impact on *previously listed* tribal cultural resources.

## Potentially Significant Impacts

**Impact TRIBAL-1: The project could cause a substantial adverse change in the significance of as-yet unknown tribal cultural resources. (PS)**

As discussed in *Section 4.4, Cultural Resources*, the entire project site would be cleared of its existing buildings, subsurface infrastructure would be removed or rerouted, and a new school and related facilities would be constructed. Ground disturbance caused by the project is anticipated to reach a maximum depth of 6 feet.

Although no archaeological resources are known to be present at the project site and the area is not geologically sensitive for subsurface archaeological resources (see *Section 4.4, Cultural Resources*), such materials may be buried and exposed during project construction ground-disturbing activities. Similarly, Native American human remains may be uncovered during project excavations. As discussed under *Environmental Setting* above, an NAHC file search indicated that significant resources are located in the vicinity of the project site.

Buried archaeological remains may be determined eligible for listing in the California Register of Historical Resources or as tribal cultural resources, as would human remains, which are unquestionably tribal cultural resources. Some archaeological resources may not qualify as a tribal cultural resource according to traditional scientific archaeological standards, but they may still be considered tribal cultural resources by affected tribes. In this case, LASD, as the lead agency under CEQA, would have the authority to determine that, at its discretion and supported by substantial evidence, the resource qualifies as a tribal cultural resource.

As a result, disturbance to unanticipated discoveries of archaeological resources and human remains could cause a substantial adverse change in the significance of a tribal cultural resource. Implementation of Mitigation Measure CULT-1 (in *Section 4.4, Cultural Resources*) would reduce impacts on buried tribal cultural resources that are archaeological sites to a level of less than significant with mitigation. Adherence to Mitigation Measure CULT-2 (in *Section 4.4, Cultural Resources*), which requires halting work if human remains are uncovered, assessment by the county coroner, notifying the NAHC if the remains are Native American, and working with local tribes to respectfully determine disposition of the remains, would reduce impacts on unexpected discoveries of human remains to less than significant.

> *Mitigation Measure TRIBAL-1: The Los Altos School District (LASD) shall implement Mitigation Measures CULT-1 and CULT-2. (LTS)*

## Cumulative Impacts

As discussed above, the project would not affect any known tribal cultural resources. Thus, development of the project site would not contribute to a potential cumulative impact on known tribal cultural resources, and no cumulative impact has been identified.

The project's demolition and construction activities would create the potential for encountering previously unrecorded archaeological resources and human remains that would be determined tribal cultural resources, as discussed under Impact TRIBAL-1. Implementation of Mitigation Measures CULT-1 and CULT-2 would, however, reduce any potential impacts on these resources to less-than-significant levels. Furthermore, all projects in the vicinity considered under cumulative impacts would have to address the discovery of human remains according to California Health and Safety Code Section 7050.5, which is discussed under *State Regulations* in *Section 4.4, Cultural Resources*, of this EIR. Therefore, the project's contribution to cumulative impacts on tribal cultural resources would not be cumulatively considerable, and no additional mitigation measures would be required.

## REFERENCES

City of Mountain View. 2012. 2030 General Plan, amended through August 2021. Website: https://www.mountainview.gov/depts/comdev/planning/regulations/general.asp, accessed August 12, 2022.

# 4.16 UTILITIES AND SERVICE SYSTEMS

## INTRODUCTION

This section of the Draft Environmental Impact Report (EIR) describes the existing setting and the project's potential impacts on water, wastewater, solid waste disposal, and other utilities and services. Project impacts related to storm drainage are addressed in *Section 4.9, Hydrology and Water Quality,* and impacts on electricity and natural gas services are addressed in *Section 4.5, Energy.*

## ENVIRONMENTAL SETTING

### Water Supply and Distribution in Mountain View

The City of Mountain View owns and operates its own water utility that serves most areas of the city, including the project site. The city's municipal water system serves three pressure zones and consists of three wholesale water turnouts, four reservoirs, three pump stations, four active groundwater supply wells, and buried pipelines of varying composition, ages, and sizes. The City currently serves 17,543 potable water service connections and 58 active recycled water service connections (City of Mountain View, 2021).

The City of Mountain View receives most of its drinking water from the City and County of San Francisco's Regional Water System, operated by the San Francisco Public Utilities Commission (SFPUC). The City of Mountain View is a member of the Bay Area Water Supply and Conservation Agency (BAWSCA), which represents the 26 water agencies that purchase water wholesale from the SFPUC. The City of Mountain View also purchases water wholesale from the Santa Clara Valley Water District (now known as Valley Water) and pumps local groundwater from City-owned wells. The City of Mountain View has a recycled water distribution system to meet non-potable demand in the North Bayshore Area. In 2020, the city's water supply consisted of 84 percent SFPUC water, 10 percent Valley Water, 2 percent groundwater, and 4 percent recycled water (City of Mountain View, 2021).

The City of Mountain View plans to meet projected water demand during normal and dry-year scenarios using a combination of existing supplies and demand-reduction measures. Valley Water, local groundwater, and recycled water supplies are projected to be fully available during all year types (normal and dry) through 2045. Based on the information provided by the SFPUC under their Bay Delta Plan scenario, Mountain View will have full SFPUC supply availability during normal years but will experience SFPUC supply shortfalls between 36 percent and 54 percent during dry years. The City of Mountain View plans to increase groundwater production to mitigate impacts of the SFPUC's possible dry-year supply shortfalls (City of Mountain View, 2021).

## Wastewater Collection and Treatment in Mountain View

The City of Mountain View operates and maintains a wastewater collection (sewer) system that serves most areas of the city, including the project site. The sewer system consists of 159 miles of gravity sewers (approximately 3,850 line segments), approximately 1 mile of 42-inch force main, and two pump stations. The sewers range in size from 4 inches to 42 inches in diameter. There are approximately 16,000 sanitary sewer laterals in the city. Maintenance and repair of the sanitary sewer laterals are generally the responsibility of the property owner. The City does not own any portion of the service lateral (City of Mountain View, 2018).

The city's system delivers wastewater to the Regional Water Quality Control Plant (RWQCP) in Palo Alto for treatment. The RWQCP is owned and operated by the City of Palo Alto and serves the communities of Los Altos, Los Altos Hills, Mountain View, and Palo Alto, as well as Stanford University and the East Palo Alto Sanitary District. The RWQCP has a design capacity of 39 million gallons per day (mgd). In 2018, average dry weather influent flow was 16.8 mgd (May to October), and average daily flow was 17.4 mgd. Average dry weather flow is below design capacity. In 2020, Mountain View's wastewater generation was 6.88 mgd (City of Palo Alto, 2019; City of Mountain View, 2021).

Mountain View is allotted 15.1 mgd of the RWQCP's capacity. The City of Mountain View's agreement with the City of Palo Alto states that, when Mountain View reaches 80 percent of its 15.1 mgd allotment (or approximately 12.08 mgd), the City of Mountain View will conduct an engineering study to redefine future needs (City of Mountain View, 2012b).

## Solid Waste Disposal in Mountain View

Recology Mountain View provides solid waste, recycling, and organics collection services to residential and commercial customers in Mountain View. The City of Mountain View partners with the cities of Palo Alto and Sunnyvale on the Sunnyvale Materials Recovery and Transfer Station (SMaRT Station), which processes all recyclable materials collected from Mountain View customers including residential and commercial recyclables, commercial cardboard, and construction and demolition debris. The SMaRT Station also processes mixed waste (materials placed in trash containers) from Mountain View to recover recyclable and compostable materials that would have otherwise gone to a landfill. After sorting, remaining trash (residual) is transferred to the Kirby Canyon Landfill in San Jose (City of Mountain View, 2019).

Kirby Canyon Landfill has a permitted capacity of 36.4 million cubic yards and a permitted throughput of 2,600 tons of solid waste per day. The landfill's estimated remaining capacity is approximately 16.2 million cubic yards and its estimated closure date is 2059 (CalRecycle, 2023b).

## Other Utilities in Mountain View

Pacific Gas & Electric Company (PG&E) provides natural gas service, and PG&E and Silicon Valley Clean Energy (SVCE) provide electricity in Mountain View. SVCE is a public, not-for-profit agency that provides clean electricity to residential and business customers in 13 Santa Clara County communities, using existing PG&E infrastructure (SVCE, 2023). Mountain View has two main telecommunications providers—AT&T and Xfinity—and at least nine residential internet providers (Broadband Now, 2023).

### Utilities and Service Systems at Project Site and in Vicinity

The project site is located in a developed area (the San Antonio Center shopping area) within the Mountain View city limits and is currently served by existing water, wastewater, storm drainage, electricity, natural gas, and other service systems. The project site currently contains approximately 137,940 square feet of commercial building area and approximately 461 parking spaces.

Existing easements on the project site include 10-foot utility easements in the center of the site and a 28-foot-wide easement along Pacchetti Way, as shown in Figure 3-9 in *Chapter 3, Project Description,* of this EIR. A parking lot notch easement also exists on the southern edge of the site. On-site utilities connect to all existing buildings on the project site except for the small building at the corner of Showers Drive and California Street, which has standard service connections to public utilities within public rights-of-way (Ingram, 2023a). The project site is served by an 8-inch water main on California Street and sewer mains on California Street and Showers Drive (Schaaf & Wheeler, 2023; see **Appendix G**).

Also as described in *Chapter 3, Project Description,* a parcel adjoining the project site is owned by the City and County of San Francisco and contains a large-diameter transmission pipeline that is part of the Hetch Hetchy regional water system and is owned by the SFPUC.

In its response to the Notice of Preparation (NOP) for the project, the City of Mountain View Public Works Department noted existing sewer deficiencies for projects along Sondgroth Way, San Antonio Road, and Showers Drive and indicated that the San Antonio Area Sewer Improvement Project (Project 17-50) has completed 100 percent design and is undergoing easement acquisition with the City of Palo Alto (City of Mountain View Public Works Department, 2022).

## REGULATORY FRAMEWORK

### Federal Regulations

No federal regulations related to utilities and service systems would be applicable to the proposed project.

### State Regulations

*State Requirements for Water Supply Assessment*

In 2001, the California legislature enacted Senate Bill (SB) 610, designed to achieve greater coordination between water suppliers and local land use agencies when considering certain large-scale development proposals. SB 610 requires preparation of a Water Supply Assessment for any development that involves an approval subject to the California Environmental Quality Act (CEQA) and that meets the definition of “project” under Water Code Section 10912(a)(7)—i.e., a residential development project of more than 500 housing units or other types of development expected to use an equivalent or greater amount of water (State of California, 2001).

Under SB 610, the Water Supply Assessment must describe the proposed project’s water demand over a 20-year period, identify the sources of water available to meet that demand, and assess whether those water supplies are or will be sufficient to meet the demand for water associated with the proposed project, in addition to the demand of existing customers and other planned future development. If the assessment concludes that water supplies are or will be insufficient, the assessment must describe plans (if any) for acquiring additional water supplies, and the measures that are being undertaken to acquire and develop those supplies (State of California, 2001).

*State CALGreen Code Requirements*

The Division of the State Architect (DSA) reviews school project designs to determine compliance with State of California requirements, including the California Green Building Standards Code (CALGreen Code). The CALGreen Code includes requirements for water efficiency and conservation, including indoor plumbing and landscape irrigation systems. The CALGreen Code also includes requirements for waste reduction and recycling; these include requirements that a minimum of 65 percent of non-hazardous construction and demolition waste be recycled and/or salvaged for reuse, that a construction waste management plan be prepared unless the local jurisdiction has a construction and demolition waste management ordinance that is more stringent, and that readily accessible areas be provided to allow recycling by project occupants (DSA, 2020).

*California Integrated Waste Management Act*

The California Integrated Waste Management Act of 1989 (“CIWMA”) (Public Resources Code, Division 30, enacted through State Assembly Bill [AB] 939 and modified by subsequent legislation) was enacted to reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible. Specifically, the CIWMA required city and county jurisdictions to plan and implement programs to divert 50 percent of the total waste stream from landfill disposal by the year 2000. (Public Resources Code, Section 41780.) The CIWMA also requires each city and county to promote source reduction, recycling, and safe disposal or transformation. California cities and counties are required to submit annual reports to the state on their progress toward AB 939 goals.

*Assembly Bill 341*

In 2011, AB 341 (Chesbro) was signed by Governor Brown and became law (Public Resources Code Sections 41730, *et seq.*, 42649, *et seq.*). The law implements a policy goal of the state that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020.

## Local Regulations

*City of Mountain View Water Conservation Regulations*

The City of Mountain View’s water conservation requirements are set forth in Chapter 35, Article II, Division 3 of the Municipal Code. The regulations identify non-essential water uses that are prohibited at all times and establish additional restrictions on water use during water shortages. The regulations include plumbing requirements and landscaping irrigation restrictions under certain conditions (City of Mountain View, 2023a).

*City of Mountain View Green Building Code*

The City of Mountain View Green Building Code is contained in Chapter 8, Article I, Division 3 of the Municipal Code. The regulations adopt the California Green Building Standards Code, 2022 edition, and include amendments made by the City of Mountain View. The regulations address energy use, stormwater control, and other requirements (City of Mountain View, 2023b).

*City of Mountain View Construction and Demolition Debris Diversion Regulations*

The City of Mountain View's requirements for construction and demolition debris diversion are set forth in Chapter 16, Article III of the Municipal Code. The regulations require that at least 65 percent of non-hazardous construction and demolition waste, or the minimum diversion rate required by the California Green Building Standards Code (whichever is higher), be recycled and/or salvaged for reuse. The regulations include requirements for submittal of a construction and demolition debris management plan for approval by the City public works director or designee before issuance of a building permit. The regulations apply to all newly constructed buildings, demolition projects of 5,000 square feet or more, and any other projects subject to the California Green Building Standards Code, Title 24, Part 11, Sections 4.408 and 5.408 (City of Mountain View, 2023c).

*City of Mountain View Zero Waste Policy and Zero Waste Plan*

The City of Mountain View's Zero Waste Policy and Zero Waste Plan set a goal to divert 90 percent of Mountain View's waste from landfills by 2030. The Zero Waste Plan establishes programs and initiatives for meeting that goal, including technical assistance to schools. The Zero Waste Plan also contains a provision for a possible increase in construction and demolition diversion requirements (e.g., 75 percent for all construction debris and 100 percent for concrete, asphalt, soil and metal), source-separation of recyclable materials, and deconstruction prior to demolition to increase salvage and recyclability of materials (City of Mountain View, 2019).

*City of Mountain View General Plan*

The City of Mountain View's 2030 General Plan contains the following policies that would apply to the project and were adopted for the purpose of avoiding or mitigating an environmental impact related to utilities and service systems (City of Mountain View, 2012a):

Policy INC 1.3: *Utilities for new development*. Ensure adequate utility service levels before approving new development.

Policy INC 2.4: *Emergency preparedness and critical infrastructure*. Ensure emergency preparedness for all critical infrastructure including potable water, wastewater, stormwater, recycled water, telecommunications, energy and streets.

Policy INC 4.1: *Water supply.* Maintain a reliable water supply.

Policy INC 5.2: *Citywide water conservation.* Reduce water waste and implement water conservation and efficiency measures throughout the city.

Policy INC 5.5: *Landscape efficiency.* Promote water-efficient landscaping including drought-tolerant and native plants, along with efficient irrigation techniques.

Policy INC 5.6: *Indoor efficiency.* Promote the use of water-efficient fixtures and appliances.

Policy INC 6.1: *Citywide wastewater.* Ensure high-quality wastewater collection services and a well-maintained wastewater system.

Policy INC 6.2: *Pollution source control.* Implement an effective and comprehensive industrial pretreatment program and industrial, commercial and residential pollution source control programs.

Policy INC 10.1: *Zero waste.* Pursue a citywide goal of zero waste.

Policy INC 10.3: *Source reduction.* Encourage and promote source reduction behavior such as utilizing reusable, returnable and repairable goods.

Policy INC 10.4: *Construction waste reuse.* Encourage building deconstruction and reuse and construction waste recycling.

Policy INC 11.1: *Waste diversion and reduction.* Meet or exceed all federal, state and local laws and regulations concerning solid waste diversion and implementation of recycling and source reduction programs.

Policy POS 9.1: *Sustainable design.* Promote sustainable building materials, energy-efficient and water-efficient designs, permeable paving and other low-impact features in new public buildings.

*San Antonio Precise Plan*

The City of Mountain View's San Antonio Precise Plan area includes the project site, and the Precise Plan includes the following relevant standards for water efficiency and conservation (City of Mountain View, 2014):

- *Indoor Water Use Performance.* New construction shall meet LEED prerequisites and mandatory CALGreen requirements for baseline indoor water use performance. Indoor water use performance standards may be achieved through plumbing fixtures and fixture fittings and/or appliances.
- *Outdoor Water Use Performance.* New construction shall meet LEED prerequisites and mandatory CALGreen requirements the baseline outdoor water use performance. Outdoor water use performance standards may be achieved using efficiency, alternative water sources, and smart scheduling techniques.
- *Metering.* New construction shall meet mandatory CALGreen requirements for indoor and outdoor water metering.
- *Water Conservation in Landscaping Ordinance.* All development in the Plan Area is required to comply with the City of Mountain View's Water Conservation in Landscaping Ordinance.

- *Rainwater Harvesting.* New development is encouraged to reduce stormwater runoff and the amount of potable water used for non-potable purposes by collecting and using rainwater.
- *Water Conservation.* Reduce potable water consumption and increase non-potable water use with the following:
  - *Efficient Plumbing Fixtures.* High-efficiency, low water-use plumbing fixtures and appliances should be used.
  - *Water Reuse.* New development is encouraged to reduce stormwater runoff and the amount of potable water used for non-potable purposes by collecting and using rainwater onsite, employing onsite greywater systems for irrigation, as feasible, and other water conservation applications.

## ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### Significance Criteria

For the purposes of this Draft EIR and based on Appendix G of the CEQA Guidelines, implementation of the proposed project would have a significant effect on utilities and service systems if it would:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;

b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry or multiple dry years;

c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or

e) Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

### Less-than-Significant Impacts

*Relocation or Construction of New or Expanded Utilities*

*The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or other utilities, the construction or relocation of which could cause significant environmental effects.*

As noted in *Chapter 3, Project Description,* of this EIR, the project would include installation and rerouting of on-site utilities and "as-needed" improvements to off-site utilities. Existing water, sewer, electrical and natural gas lines located on the project site would likely require rerouting to serve the proposed new buildings, and telecommunication lines would also have to be installed to serve the new buildings.

The Los Altos School District (LASD) anticipates that all on-site easements and utility lines except the Pacchetti Way utility easement (see Figure 3-9 in *Chapter 3, Project Description*) would be vacated and demolished or abandoned to make way for project construction. LASD does not anticipate construction activity within the Pacchetti Way easement. LASD anticipates that the City of Mountain View Public Works Department would specify requirements for protection of utilities in public rights-of-way when project permit applications are submitted (Ingram, 2023a).

A Utility Impact Study memorandum prepared for LASD by Schaaf & Wheeler concluded that the project would have no significant impacts on the existing City of Mountain View water and sewer systems serving the project site, including areas where the existing systems are deficient (Schaaf & Wheeler, 2023; see **Appendix G**). The memorandum noted that the project would decrease water demand and sewage generation, compared to existing conditions (see details under *Sufficiency of Water Supplies* and *Wastewater Treatment Capacity* below). Based on these conclusions, the project is unlikely to require construction of new or expanded water or sewer facilities.

Utility line installation and relocation within the project site would take place within the project's overall area of disturbance, and therefore the environmental impacts of these utility changes are generally evaluated throughout this Draft EIR as part of the analysis of the project as a whole. Any off-site utility line installation, relocation, or expansion necessary to serve the project may require separate review under the California Environmental Quality Act (CEQA).

*Sufficiency of Water Supplies*

*The project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry or multiple dry years.*

According to the Utility Impact Study memorandum prepared for LASD by Schaaf & Wheeler, the project would result in a net decrease in water use, compared to existing and former commercial uses on the project site. The net decrease in water use is estimated at approximately 21,785 gallons per day (gpd). This estimate assumes that (1) the existing and former commercial uses on the project site created a total water demand of 33,494 gpd, and (2) the proposed 900-student school would create a water demand of 11,709 gpd (Schaaf & Wheeler, 2023; see **Appendix G**). The net decrease in water use would therefore be 21,785 gpd (11,709 gpd for proposed uses minus 33,494 gpd for existing uses = -21,785 gpd.)

The project may also use water during project construction, but the amount and source have not been determined (Ingram, 2023a). While building construction can lead to slight increases in water demand (e.g., due to watering of exposed surfaces), these increases would be temporary and would not create a need for new or expanded water allotments.

Based on the above long-term water demand estimates, the project would use less water than 500 housing units, and therefore a Water Supply Assessment under state law (SB 610) would not be required for the project.[1]

[1] Based on the City of Redwood City's water demand projection worksheet (Ingram, 2023b), 500 housing units would use 130,900 gpd of water. The calculation is as follows: 500 units x 3.4 persons per unit x 60 gpd per person = 102,000 gpd; plus landscaping water demand of 17 gpd per person x 500 units x 3.4 persons per unit = 28,900 gpd; 102,000 + 28,900 = 130,900 gpd, which exceeds the estimate for the proposed project (11,709 gpd).

Since the project would result in a net decrease in water demand compared to existing and former commercial uses on the project site, the project's impact on water supplies would be less than significant.

*Wastewater Treatment Capacity*

*The project would not result in a determination by the wastewater treatment provider that serves the project site that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.*

According to the Utility Impact Study memorandum prepared for LASD by Schaaf & Wheeler, the project would result in a net decrease in sewage generation, compared to existing and former commercial uses on the project site. The net decrease in sewage generation is estimated at 12,777 gpd. This estimate assumes that (1) the existing and former commercial uses on the project site created a total average daily sewage flow of 23,316 gpd, and (2) the proposed school use would generate 10,539 gpd. The net decrease in sewage generation would therefore be 12,777 gpd (10,539 gpd for proposed uses minus 23,316 gpd for existing uses = -12,777 gpd.)

The project would not generate sewage during construction, as construction of this type does not require sewer service and the general contractor would use porta-potty services scaled as needed for the various phases of construction (Ingram, 2023a).

Since the project would result in a net decrease in sewage generation compared to existing and former commercial uses on the project site, the project's impact on wastewater treatment capacity would be less than significant.

*Solid Waste Capacity and Compliance with Standards*

*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. The project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.*

Solid waste would be generated during both project construction and operation. The project would involve demolition of existing structures and construction of new structures on the project site. Once in operation, the project would receive solid waste collection services through Recology Mountain View.

As noted in *Chapter 3, Project Description,* of this EIR, it is assumed that the proposed demolition of the on-site 137,940 square feet of buildings and parking areas and remedial excavation of native occurring asbestos would result in about 16,000 tons of potentially recyclable demolition materials and 5,350 tons of construction and demolition debris. As noted in *Chapter 3, Project Description*, LASD anticipates transporting recyclable materials to Stevens Creek Quarry and construction and demolition debris to Zanker Road Landfill in San Jose. This debris would represent about 1.5 percent of the Zanker Road Landfill's 360,000-ton remaining capacity as recorded by the State of California, but since state records show that landfill as "closing" it is not certain if it would be available when project construction is underway (CalRecycle, 2023c). If this debris were instead disposed of at Kirby Canyon Landfill, it would represent far less than 1 percent of the landfill's remaining capacity. In its review of the project, the Division of the State Architect (DSA) would require that a construction waste management plan be prepared for the project in compliance with State of California or City of Mountain View requirements, whichever are more stringent.

Once in operation, the project could result in a net increase in solid waste generation, compared to commercial uses that formerly occupied the site, but any increase would likely be very small. This conclusion assumes that (1) the 137,940 square feet of commercial building space on the project site generated 0.006 pound per square foot per day (CalRecycle, 2023a),[2] or approximately 828 pounds of solid waste per day; and (2) the proposed school use would generate approximately 900 pounds of solid waste per day, assuming 1 pound of solid waste per student per day[3] and an enrollment of 900 students.

The project would not generate solid waste that exceeds the capacity of local infrastructure and would comply with applicable statutes, regulations, and standards related to solid waste. For these reasons, the project's solid waste disposal impacts would be less than significant.

## Potentially Significant Impacts

No potentially significant impacts related to utilities and service systems would result from the project.

## Cumulative Impacts

For water, wastewater, solid waste disposal, and other utilities and service systems, the geographic scope for assessing cumulative impacts is the area within the Mountain View city limits, which is served by the City of Mountain View (for water and wastewater services), Recology Mountain View (for solid waste disposal service), PG&E for electricity and natural gas service, SVCE (for electricity), and AT&T, Xfinity, and other providers (for telecommunications service). Projects in Mountain View that are pending, approved, or under construction in the project site vicinity would provide for net increases of 747 housing units, 82 hotel rooms, and 74,455 square feet of commercial (retail and office) building space (see Table 6-1 and Figure 6-1 in *Chapter 6, Other CEQA Considerations,* of this EIR). Anticipated development also includes a 2.2-acre future City park on the project site, as provided by the proposed project (see *Chapter 3, Project Description*, and Table 6-1 and Figure 6-1 in *Chapter 6, Other CEQA Considerations*, of this EIR).

The proposed LASD 10th Site School project, in conjunction with these and other past, present, and reasonably foreseeable future projects, could result in a cumulative increase in demand for water, wastewater, solid waste disposal, and other utilities and service systems. As discussed in the above project-specific analysis, however, the project's impacts on water, wastewater, and solid waste disposal services are expected to be less than significant. In addition, the Utility Impact Study memorandum prepared for LASD by Schaaf & Wheeler evaluated future cumulative conditions and concluded that the project would not contribute to new deficiencies in the City of Mountain View water and sewer systems that serve the project site and vicinity (Schaaf & Wheeler, 2023; see **Appendix G**). Furthermore, the 2014 EIR on the San Antonio Precise Plan (which encompasses

[2] This rate was used in a recent EIR to estimate solid waste generation for a comparable retail area in the Broadway Plaza project in Redwood City (Placeworks, 2018).
[3] This rate is the most conservative (i.e., highest) among several student-based rates for schools listed on the State of California Department of Resources Recycling and Recovery (CalRecycle) website (CalRecycle, 2023a).

the project site and surrounding areas), the 2022 EIR Addendum on San Antonio Precise Plan amendments for The Village at San Antonio-Phase III project (a proposed development in the project site vicinity), and the 2022 EIR on the citywide Mountain View Housing Element update all concluded that anticipated population increases and other cumulative growth would not result in significant cumulative impacts on utilities and service systems (LSA Associates, Inc., 2014; ICF, 2022; City of Mountain View, 2022). For these reasons, the proposed project is not expected to result in or contribute to any significant cumulative impacts on utilities or service systems.

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# 5. ALTERNATIVES

## 5.1 SUMMARY OF ALTERNATIVES

The California Environmental Quality Act (CEQA) Guidelines (Section 15126.6) require that an Environmental Impact Report (EIR) describe and evaluate the comparative merits of a range of reasonable alternatives to the project, or to the location of the project, that could feasibly attain most of the basic objectives of the project. The CEQA Guidelines further require that the discussion focus on potentially feasible alternatives capable of avoiding or substantially lessening any of the significant effects of the project, including the "No Project" Alternative. Furthermore, if the environmentally superior alternative is the "No Project" Alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives (CEQA Guidelines Section 15126.6(e)).

There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the "rule of reason" (CEQA Guidelines Section 15126.6(a)). The "rule of reason" requires that an EIR set forth only those alternatives necessary to permit a reasoned choice, and that these be limited to realistic alternatives that the lead agency determines could feasibly obtain most of the basic project objectives while avoiding or substantially lessening one or more of the significant effects (CEQA Guidelines Section 15126.6). The scope of alternatives comprising a reasonable range is in the lead agency's discretion and will vary from case to case depending on the nature of the project under review (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 566). Pursuant to the CEQA Guidelines (Section 15126.6(f)(3)), "An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative."

The requirement that an EIR evaluate alternatives to the proposed project or its location is broad. The description or evaluation of alternatives does not need to be exhaustive or as detailed as that provided for the proposed project (CEQA Guidelines Sections 15126.6(a) and (c)). Alternatives need be environmentally superior to the proposed project in only some respects (*Sierra Club v. City of Orange* (2008) 163 Cal.App.4th 523, 547).

### ALTERNATIVES IDENTIFIED AND APPROACH TO EVALUATION

The discussion in this chapter focuses on feasible alternatives that could obtain most of the project objectives, which are discussed in *Chapter 3, Project Description*, of this EIR, and reduce the project's potentially significant impacts. The EIR identifies potentially significant impacts that can be reduced to less-than-significant levels with implementation of mitigation measures for aesthetics, air quality, biological resources, cultural resources, geology, hydrology, and tribal cultural resources. The project would not have any significant and unavoidable impacts.

Two alternatives to the project are evaluated in this chapter:

- Alternative 1: No Project Alternative
- Alternative 2: Reduced Scale and No Turf Alternative

These alternatives were identified as a reasonable range of alternatives for discussion in this EIR based on the following factors:

- The extent to which the alternative would accomplish most of the basic project objectives and purposes;
- The extent to which the alternative would reduce or eliminate one or more of the significant environmental effects of the project;
- The feasibility of the alternative, including whether the alternative could be accomplished in a successful manner within a reasonable period of time taking into account site suitability, economic viability, availability of infrastructure, and economic, environmental, legal, social, and technological factors (CEQA Guidelines Sections 15364 and 15126.6(f); Public Resources Code Section 21061.1);
- The extent to which the alternative would contribute to a “reasonable range” of alternatives necessary to permit a reasoned choice; and
- The requirement under the CEQA Guidelines to consider a No Project Alternative and to identify an “environmentally superior” alternative in addition to the No Project Alternative (CEQA Guidelines Section 15126.6(e)).

Alternatives that were considered but rejected as infeasible are discussed in Section 5.2 below.

The topics covered for each alternative are those also covered for the proposed project. For example, the topics of agricultural/forestry resources and mineral resources are not covered because these are not relevant to the project.

## PROJECT OBJECTIVES

The following are the primary project objectives as outlined by the Los Altos School District (LASD):

- To address increasing enrollment while providing students and faculty with a learning environment that reflects the LASD Facilities Master Plan (LASD, 2022).
- To provide an innovative and engaging learning experience that fosters development of the “whole child” and ensures that all students are well prepared to succeed in the 21st century.
- To meet the intent of the LASD Facilities Master Plan (LASD, 2022) and to provide a new school in a location that fosters walking and biking by nearby families.
- To provide a site plan that allows for flexibility in the grades to be accommodated and that provides space for up to 900 students over time.
- To create facilities that have the capacity for both current and future projected enrollment.
- To provide buildings that can easily be modified to serve different grade levels, depending on LASD needs over time.
- To provide campus buildings that meet all fire safety requirements, Americans with Disabilities Act (ADA) requirements, energy conservation goals, seismic safety requirements, and campus security needs as required by the Division of the State Architect.

- To incorporate environmental principles into the project design, such as energy conservation measures and the use of on-site bioretention for site runoff.
- To maximize play areas while also allowing adequate space for needed classrooms.

## 5.2 ALTERNATIVE CONSIDERED BUT REJECTED

In addition to the alternatives included in Section 5.3, an off-site alternative was also considered for the project but was rejected given LASD's extensive previous work on finding a suitable site for the proposed new school. The history behind the selection of the project site is provided below.

LASD experienced significant growth in the early 2000s, which led to the formation of a task force (Superintendent's Enrollment Growth Task Force) charged with providing options and direction in dealing with the explosive enrollment growth. In addition to the growth in LASD enrollment, LASD had been housing a county-sponsored charter school on its campuses (first on the Egan Junior High campus and later both the Blach Intermediate School campus and the Egan campus). Thus, school sites were already crowded. In parallel with LASD enrollment growth, the charter school also incurred explosive enrollment growth. In 2012 the task force recommended that LASD pursue and acquire at least one new school site. Shortly after the task force finalized its recommendations, a committee was formed to investigate various site options. The committee was called the 10th Site Committee, since LASD at the time had only nine school sites. That committee investigated dozens of site options and eventually narrowed down the search to a handful of realistic possibilities.

In 2014, LASD put a bond measure on the ballot to help finance the purchase and development of a new school site. Proponents of the measure used the rallying cry "10 sites for 10 schools," with the charter school being the 10th school requiring facilities. The bond measure was successful and provided LASD with the means to make acquiring a new site a reality.

Over the next few years, LASD explored and reviewed various options, with a focus on key criteria such as site accessibility, traffic, flexibility for future use, and cost. Possible sites were identified in Los Altos, Los Altos Hills, and Mountain View including the Hillview site, O'Keefe lands in Los Altos Hills, 5150 El Camino Real, and 201 San Antonio Circle (the Old Mill site in Mountain View). For a variety of reasons, locating a new school in the area of the school district in Mountain View and north of El Camino Real emerged as the best option. That area had seen, and continues to see, the greatest enrollment growth, especially as new housing is built in Mountain View.

Because the Old Mill site was already in contract to be redeveloped, LASD approached the owner of the Kohl's site (Federal Realty) to see if they were willing to make part of their San Antonio Center property available for LASD's new school site. The City of Mountain View became a partner in the site purchase, providing funds in exchange for joint use of the site's recreational facilities and allocation of 2 acres for a new City park. In December 2019, LASD consummated purchase of 11.5 acres in the San Antonio Center (the Kohl's site).

# 5.3 SUMMARY OF ALTERNATIVES

## ALTERNATIVE 1: NO PROJECT ALTERNATIVE

### Overview

Alternative 1, the No Project Alternative, would leave the project site unchanged. No new buildings, drainage improvements, access changes, or other improvements would be made to the existing site that is now occupied by commercial buildings and paved parking areas. The No Project Alternative would leave this developed portion of the San Antonio Precise Plan in its current condition and no school would be developed.

### Impacts

*Aesthetics*

No removal of buildings or construction of new school buildings would occur under the No Project Alternative. Existing vacated commercial buildings would remain. No new lighting of sports fields would take place. (This lighting is the only potentially significant aesthetic impact of the proposed project.)

*Air Quality*

No demolition of existing commercial buildings, construction of new school buildings, or changes to vehicle trips would occur under the No Project Alternative. As a result, there would be no impact on air quality.

*Biological Resources*

No removal of trees or plantings on the site would occur under the No Project Alternative; thus, no potential impacts on nesting birds would occur.

*Cultural Resources*

The No Project Alternative would not change the existing conditions; the extant buildings would remain and there would be no ground disturbance. As a result, there would be no impact on cultural resources.

*Energy*

The No Project Alternative would have no impacts related to energy as there would be no change from existing conditions. However, the No Project Alternative would not allow the opportunity for improvements to building energy efficiency, such as the zero-net energy goals that would be implemented by the proposed project.

*Geology and Soils*

The No Project Alternative would have no impacts related to geology and soils as there would be no change from existing conditions.

*Greenhouse Gas Emissions*

The No Project Alternative would have no impacts related to greenhouse gas emissions as there would be no change from existing conditions. However, the No Project Alternative would not allow the opportunity for improvements to building energy efficiency and associated greenhouse gas emissions, such as the zero-net energy goals that would be implemented by the proposed project.

*Hazards and Hazardous Materials*

The No Project Alternative would have no impacts related to hazards and hazardous materials as there would be no change from existing conditions. However, the No Project Alternative would not allow the opportunity for the removal and/or capping of soil containing naturally occurring asbestos (NOA).

*Hydrology and Water Quality*

The No Project Alternative would have no impacts related to hydrology and water quality as there would be no change from existing conditions. However, the No Project Alternative would not allow the opportunity for the construction of stormwater control and treatment systems that would reduce contaminants in stormwater runoff from the project site compared to the existing condition.

*Land Use*

No change in land use would occur under the No Project Alternative. Existing commercial buildings and large expanses of surface parking would remain on the site.

*Noise*

The No Project Alternative would have no impacts related to noise and vibration as there would be no change from existing conditions.

*Public Services*

No impacts on fire protection, police, or other public services would occur under the No Project Alternative, as there would be no change from existing conditions.

*Recreation*

No impacts on parks or other recreational facilities would occur under the No Project Alternative, as there would be no change from existing conditions. Since the proposed school project would not proceed, the proposed conveyance of a 2.2-acre area of the project site to the City of Mountain View for a future neighborhood park would not occur and joint use recreational facilities would not be developed.

*Transportation*

The No Project Alternative would result in unchanged permitted land use. Existing retail land uses that generate vehicle trips and vehicle miles traveled would remain unchanged.

*Tribal Cultural Resources*

No tribal cultural resources are known to exist at the project site; therefore, no impact on tribal cultural resources would occur under this alternative.

*Utilities and Service Systems*

No change in water, wastewater, or solid waste demand would occur under the No Project Alternative.

### Ability to Meet Project Objectives

The No Project Alternative would not meet any of the LASD objectives for the proposed project as no new school would be built. No new facilities to meet current and projected enrollment would be created, and no new sports field that could be shared with the surrounding residential community would be built.

## ALTERNATIVE 2: REDUCED SCALE AND NO TURF ALTERNATIVE

### Overview

Under this alternative, the new school developed on the site would serve up to 600 students, rather than 900 students as proposed under the project. The site plan would be changed in the following ways (see Figure 3-4 in *Chapter 3, Project Description*):

- Classroom Building F (12 classrooms with 25 students each) located on the south side of the campus next to the Hetch Hetchy right-of-way would not be built.
- Small Gym Building C2 would not be built.

This alternative also would not include artificial turf or nighttime lighting of fields. Playing fields would be composed of natural turf. Without lighting, fewer evening games would occur on the site.

### Impacts

*Aesthetics*

This alternative would have a small reduction in the number of new buildings on the campus but would not change the overall aesthetic impacts of the project. No lighting of sports fields would occur, which would reduce light levels at nighttime for surrounding residences. Mitigation Measure AESTHETICS-1 related to outdoor lighting controls would not be required.

*Air Quality*

Compared to the proposed project, this alternative would have similar less-than-significant impacts related to air quality. As with the proposed project, implementation of Mitigation Measure AIR-1 would reduce the potentially significant impact of this alternative to a less-than-significant level.

*Biological Resources*

This alternative would have similar tree removal impacts to the proposed project as it is assumed that the area where classroom buildings would be removed would be replaced with a paved surface play area or similar use.

*Cultural Resources*

This alternative would have similar impacts to the proposed project.

*Energy*

Compared to the proposed project, this alternative would have similar less-than-significant impacts related to energy. Without lighting of fields, less energy would be consumed.

*Geology and Soils*

Compared to the proposed project, this alternative would result in the same potentially significant impact related to paleontological resources and would have similar less-than-significant impacts related to the other geology and soils criteria. As with the proposed project, implementation of Mitigation Measure GEO-1 would reduce the potentially significant impact of this alternative to a less-than-significant level

*Greenhouse Gas Emissions*

Compared to the proposed project, this alternative would have similar less-than-significant impacts related to greenhouse gas emissions. As with the proposed project, the alternative would include the project design elements recommended in the current Bay Area Air Quality Management District (BAAQMD) CEQA thresholds of significance.

*Hazards and Hazardous Materials*

Compared to the proposed project, this alternative would have similar less-than-significant impacts related to hazards and hazardous materials.

*Hydrology and Water Quality*

Compared to the proposed project, this alternative would reduce stormwater runoff and increase groundwater recharge, as natural turf would allow for infiltration of more stormwater compared to artificial turf, which would be underlain by an impervious surface. Compared to the proposed project, this alternative would result in the same potentially significant impacts related to water quality and alteration of drainage patterns and would have similar less-than-significant impacts related to the other hydrology and water quality criteria. As with the proposed project, implementation of Mitigation Measures HYDRO-1 and HYDRO-2 would reduce the potentially significant impacts of this alternative to a less-than-significant level.

*Land Use*

Like the proposed project, this alternative would have no significant land use impacts.

*Noise*

Compared to the proposed project, this alternative would have similar less-than-significant impacts related to noise and vibration. Operational noise from the playfield activities would be reduced as nighttime games and practices would not occur due to the removal of lighting on the fields.

*Public Services*

Compared to the proposed project, this alternative would have similar less-than-significant impacts on fire protection, police, and other public services. This alternative would not create a need for new or physically altered fire stations, police facilities, or other public facilities.

*Recreation*

Compared to the proposed project, this alternative would have similar less-than-significant impacts on parks and other recreational facilities. This alternative would not increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, or such that new or altered facilities would be needed. This alternative would include recreational facilities and would not require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

*Transportation*

Compared to the proposed project, this alternative would have similar less-than-significant impacts on the transportation system. As with the proposed project, this alternative would replace the high vehicle trip generation levels of existing retail land uses with a lower vehicle trip-generating educational facility, resulting in reduced vehicle miles traveled. Fewer trips would occur in the evenings due to the removal of lighting of fields.

*Tribal Cultural Resources*

Tribal cultural resources have not been identified at the project site; therefore, the impacts of this alternative would be the same as the impacts of the proposed project.

*Utilities and Service Systems*

Overall utility and service system impacts would be similar to those of the proposed project, but slightly reduced due to the reduced student population on the campus. Irrigation water demand from this alternative would be higher compared to the project, however, if the natural turf on the playing fields were irrigated.

### Ability to Meet Project Objectives

Alternative 2 would partially meet the project objectives, but fewer students would be accommodated on the project site. Due to this reduced on-site capacity, the following three project objectives would not be met:

- To provide a site plan that allows for flexibility in the grades to be accommodated and that provides space for up to 900 students over time.
- To create facilities that have the capacity for both current and future projected enrollment.
- To provide buildings that can easily be modified to serve different grade levels, depending on LASD needs over time.

## 5.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project Alternative would be the environmentally superior alternative as no changes would occur at the project site; the existing buildings would remain and no demolition would occur, although it is not known if vacant building space would be occupied and stores would be operational. That said, with LASD's increasing enrollment needs, the absence of a school on the project site could result in increasing enrollment and demands at existing schools within the school district.

CEQA requires that if the environmentally superior alternative is the No Project Alternative, an additional environmentally superior alternative must be identified. In this case, Alternative 2 would be the environmentally superior alternative as it would result in a smaller enrollment and would have no lighting of playing fields. Compared to the project, this alternative would have reduced impacts related to aesthetics, transportation, noise, and other topics.

## 5.5 REFERENCES

California Public Resources Code, Section 21061.1.

Los Altos School District (LASD), 2022. Facilities Master Plan (Draft).

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# 6. OTHER CEQA CONSIDERATIONS

## 6.1 INTRODUCTION

As required by the California Environmental Quality Act (CEQA), this chapter of the Draft Environmental Impact Report (EIR) identifies significant irreversible effects, significant unavoidable impacts, growth inducement, and cumulative impacts that may result from the project.

## 6.2 SIGNIFICANT IRREVERSIBLE EFFECTS

Under the CEQA Guidelines (Section 15126.2(d)), impacts associated with a proposed project may be considered to be significant and irreversible for the following reasons:

- Uses of non-renewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or non-use thereafter unlikely;
- Primary impacts and, particularly, secondary impacts (such as a highway improvement that provides access to a previously inaccessible area) generally commit future generations to similar uses; and
- Irreversible damage can result from environmental accidents associated with the project.

Pursuant to the CEQA Guidelines, irretrievable commitments of resources should also be evaluated to ensure that such current consumption is justified (CEQA Guidelines Section 15126.2(d)).

The project's proposed new buildings and landscape improvements would be permanent; therefore, their installation would constitute an irreversible use of resources, as it is unlikely that new buildings would be removed. The project would irretrievably commit materials to the construction of buildings. Non-renewable resources such as sand, gravel, and steel, and some renewable resources such as lumber, would be consumed during project construction. In addition, the construction and operation of the project would result in the use of energy, including electricity and fossil fuels.

The project is not expected to result in any activities likely to result in accidents that could lead to irreversible environmental damage. While construction of the project could result in the use, transport, storage, and disposal of hazardous materials as described in *Section 4.8, Hazards and Hazardous Materials,* of this EIR, all activities would comply with applicable laws related to hazardous materials, which would significantly reduce the likelihood and severity of accidents that could result in irreversible environmental damage.

## 6.3 SIGNIFICANT UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(c) requires that the EIR identify significant environmental effects that cannot be avoided if the proposed project is implemented. The project would not have any significant and unavoidable impacts (see *Chapter 4, Environmental Setting, Impacts, and Mitigation Measures*, of this EIR).

## 6.4 GROWTH INDUCEMENT

The CEQA Guidelines require that an EIR evaluate the growth-inducing impacts of a proposed action (CEQA Guidelines Section 15126.2(e)). A growth-inducing impact is defined as:

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

A project can have direct and/or indirect growth inducement potential. Direct growth inducement would result if a project actually induced or required additional actions or projects. An example would be a new housing development that requires the construction of new utility lines and roads to serve the development. Indirect growth inducement would occur if the project would remove an obstacle to additional growth and development. An example would be a major expansion of a public service facility that increases service capability in the area.

The proposed new school would be developed in an urbanized portion of the City of Mountain View, surrounded by commercial and residential development, on a site that is already served by utilities and roads. For these reasons, the project would be unlikely to induce additional growth in the surrounding area.

The school is intended to meet the needs identified by the Los Altos School District (LASD) for a growing student population associated with population growth within its boundaries. However, the new school would not induce this growth; rather, it would respond to this growth. Therefore, the project would not have significant growth-inducing impacts.

## 6.5 CUMULATIVE IMPACTS

Cumulative impacts have been addressed in *Chapter 4, Environmental Setting, Impacts, and Mitigation Measures,* for each topic covered in this Draft EIR. A number of projects in Mountain View near the project site that are pending, approved, or under construction were considered when evaluating cumulative impacts. **Table 6-1** shows the projects nearest to the site that could result in cumulative impacts in conjunction with the proposed project. **Figure 6-1** shows the location of these projects.[1]

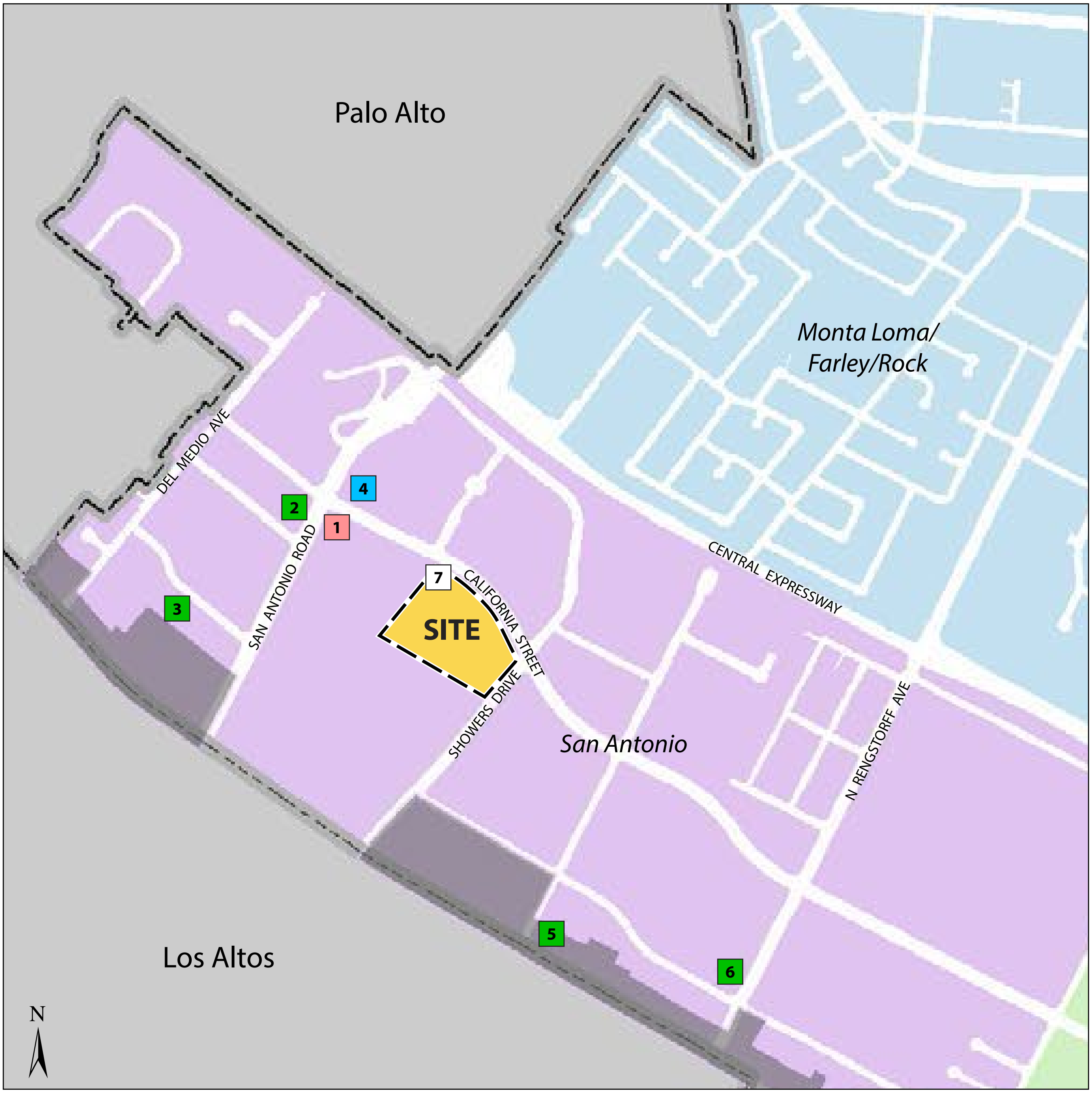
[1] The list of cumulative projects was derived from the City of Mountain View list as updated December 2022 (City of Mountain View, 2022) when the Draft EIR was underway. The City of Mountain View list may have been amended by the time this Draft EIR is published, but the cumulative analysis conclusions are not expected to require alteration, especially if the mitigation measures for the proposed project would reduce or eliminate the project's contribution to cumulative impacts.

**Table 6-1 Cumulative Projects**

| Number of Project (See Figure 6-1) | Name of Project | Location | Land Use | Action | Distance from LASD Site | December 2022 Mountain View Listing No. | Zoning/Planning and Cumulative Issues of Concern |
|---|---|---|---|---|---|---|---|
| 1 | 365 San Antonio Road and 2585-2595 California Street | Southeast corner of San Antonio Road and California Street | New 7-story, 182,352-square-foot (sf) commercial building. | Amendments to San Antonio Precise Plan; Master Plan; Planned Community Permit; and Development Review Permit; TDR from LASD TDR Program; shared parking reduction; Provisional Use Permit to allow office use; removal of 5 Heritage trees; lot line adjustment | 0.4 mile | No. 12 | Located in P-40 (San Antonio) Precise Plan area; removal of heritage trees; increased traffic from commercial (office) use. |
| 2 | 334 San Antonio Road | Corner of San Antonio Road. And California Street | 5-story, mixed-use building with 62 condo units and 2,003 sf of retail with underground parking; replaces existing gas station on 0.62-acre site. | Planned Community permit; Planned Unit Development permit; Development Review Permit | 0.4 mile | No. 20 | P-40 (San Antonio) Precise Plan area. |
| 3 | 2645-2655 Fayette Drive | South side of Fayette Drive between Del Medio Avenue and San Antonio Road | 6-story, 44-unit condo building; replaces 6 existing residential units and 6,900 sf commercial building; removal of 8 heritage trees on 0.66-acre site. | Zoning map amendment from R3-D (Multiple-Family Residential) District to P-40 (San Antonio) Precise Plan; Planned Community Permit; State Density Bonus with development waivers | 0.6 mile | No. 32 | Located in R3-D (Multiple-Family Residential District); removal of trees; increased density. |
| 4 | 2580 and 2590 California Street/201 San Antonio Circle | North side of California Street between San Antonio Road and Pacchetti Way | Master Plan, Planned Community Permit and Development Review Permit for mixed-use development with 632 residential units and 20,000 sf commercial space with below-grade parking; replaces existing 70,000 sf office building and 53,000 sf of existing retail; removal of 78 heritage trees; lot line adjustment. | Zoning map amendment from ML (Limited Industrial) district to P (Planned Community) to allow up to 0.86 FAR; Planned Community Permit | 0.3 mile | No. 57 | Located in P-40 (San Antonio) Precise Plan area. |
| 5 | 2300 West El Camino Real | North side of El Camino Real between Ortega Avenue and S. Rengstorff Avenue | Approved permit extension for use permit for hotel use and parking reduction. New 4-story, 153-room hotel with one level underground parking to replace existing 71-room hotel on 0.97-acre site. Net increase would be 82 hotel rooms. | Provisional Use Permit | 0.5 mile | No. 27 | Located in El Camino Real Planning Area and in P-38 (El Camino Real) Precise Plan area |

| Number of Project (See Figure 6-1) | Name of Project | Location | Land Use | Action | Distance from LASD Site | December 2022 Mountain View Listing No. | Zoning/Planning and Cumulative Issues of Concern |
|---|---|---|---|---|---|---|---|
| 6 | 570 S. Rengstorff Avenue | Northwest corner of Latham Street and S. Rengstorff Avenue | 2021 approval of Planned Unit Development Permit and Development Review Permit; 85 rowhouses to replace 70 apartment units on 4.07-acre site; removal of 29 heritage trees. | Planned Unit Development Permit and Development Review Permit | 0.6 mile | No. 33 | Located in R3-1.25 (Multiple-Family Residential) district in San Antonio Planning Area. |
| 7 | Future City Park | On project site, northwest corner | Planning for the park has not been undertaken; it is expected that this 2.2-acre City park would include passive recreational uses such as a picnic area and possibly a children's play area since playing fields to be built on the project site would be available for public use during non-school hours. | Site planning (to be done) | Adjacent to school site | (Not in City's table) | It is not known if a rezoning would occur. The site's current General Plan designation is "Mixed Use Center." |

Source: City of Mountain View, 2022.




LEGEND

- Project under review
- Project approved
- Project under construction
- Future City Park (2 acres)

SOURCE: City of Mountain View, April 2022

Figure 6-1

**CUMULATIVE PROJECTS**

AMY SKEWES~COX
ENVIRONMENTAL PLANNING

As can be seen in Table 6-1, a large amount of new commercial development and a significant number of new residential units could be developed in the general vicinity of the project. A net increase of 82 hotel rooms is proposed (153 new rooms and 71 rooms removed); 823 new residential units would be developed and 76 would be removed, for a net increase of 747 units. A net increase of 74,455 square feet of commercial development would occur, with 204,355 square feet of new space (including retail and office) developed and 129,900 square feet removed. A loss of 115 heritage trees would occur in the vicinity of the project site.

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# 7. EIR AUTHORS

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# APPENDIX A
# NOTICE OF PREPARATION AND COMMENT LETTERS FOR NOTICE OF PREPARATION

**NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT AND SCHEDULED SCOPING MEETING FOR THE LOS ALTOS SCHOOL DISTRICT 10th SITE COMMUNITY SCHOOL PROJECT**

July 15, 2022

The Los Altos School District (District) is preparing an Environmental Impact Report (EIR) for a new school campus, to be located at the San Antonio Center shopping mall at the intersection of California Street and Showers Drive in Mountain View (see **Figure 1**). With the project, the District would develop its tenth school campus, which may serve a range of grades and student populations over time. As the District serves grades Kindergarten (K) through 8, the only format that is ruled out is high school. The California Environmental Quality Act (CEQA) requires that the District conduct environmental review of the project, which has the potential to result in physical change in the environment. The District is the "Lead Agency" for the project and is the public agency with the principal responsibility for approving and carrying out the project. The District has determined that an EIR will be the required CEQA document for the project.

The District is issuing this Notice of Preparation (NOP) to invite comments on the scope and content of the EIR prior to its preparation. This NOP is being sent to local agencies, nearby residents, and other interested parties. When the draft EIR is published, it will be sent to all parties who respond to this NOP or who otherwise indicate that they would like to receive a copy of the draft EIR. Note that the draft EIR may be distributed in electronic format.

**RESPONDING TO THIS NOP:** Responses to this NOP and any related questions or comments regarding the scope or content of the Draft EIR must be directed in writing to **Superintendent, Los Altos School District, 201 Covington Road, Los Altos, CA 94024** or by e-mail to **Sandra Bush at SBush@lasdschools.org.**

Comments on the NOP must be received at the above mailing or e-mail address within 30 days of receipt of this notice, or **before August 15 at 5:00 PM**. Please reference the project title of "10th Site Community School LASD" in all correspondence.

Responses to this NOP should focus, specific to this project, on the potentially significant environmental effects that the project may have on the physical environment, ways in which those effects might be minimized, and potential alternatives to the project that should be addressed in the EIR. This focus aligns with the purpose of the EIR to inform the public about these aspects of the project.

**EXISTING CONDITIONS:** Existing commercial structures on the already-developed site include four buildings that total 137,152 gross square feet (gsf) of building space. These buildings have been occupied by Kohl's, 24-Hour Fitness, and Jo-Ann Fabrics.

**PROJECT DESCRIPTION:** The four existing buildings on the site would be demolished and the parking lots and landscape areas thoroughly regraded, repaved, and replanted. The proposed school facilities that would be built on the site would include library, administration, and multi-purpose buildings that are planned for change and expansion. The facilities could serve up to 900 students, although the school might initially serve 600 students or less. The EIR will evaluate a student population of 900 students.

Under the Open Space Park Property Transfer Agreement between the District and the City of Mountain View (City), 2.0 acres of the 11.7-acre site would be conveyed to the City for future development of a City neighborhood park. Because of the commitment to joint community use for the recreational facilities on the site, the school would have a compact footprint and be developed in a two-story building type. The gym and library and meeting space are independently accessible from the perimeter to allow for extended hours for these potential community uses. Classrooms for 600 students would include about 33,600 square feet housed in a two-story building. An additional 300-student wing might be built, which would add about 13,650 square feet. The total building area at full buildout would be approximately 47,250 square feet. The EIR will evaluate the full buildout square footage.

Separate vehicle entries, parking, and drop-off areas would be provided for the new school. The drop-off area would be located in front of the Administration Building in the main school parking area, in between the school site and the area to be transferred to the City for dedication as a City park. Car access would be from Pacchetti Way along the property line that runs along the park and the athletic field, leading to the school parking area. Two exits would be provided: one on California Street and one on Pacchetti Way. There would be no entry from California Street except for emergency vehicles. Approximately 54 parking spaces would be provided, 4 of which would be handicapped-accessible (under the Americans with Disabilities Act [ADA]). The site would be laid out to allow overflow event parking on the blacktop playground adjacent to the parking area.

**POTENTIAL ENVIRONMENTAL EFFECTS:** The EIR will address the following potential environmental effects: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Energy, Geology/Soils, Hazards, Noise, Public Services, Recreation, Greenhouse Gas Emissions, Hydrology and Water Quality, Land Use, Transportation, Tribal Cultural Resources, and Utilities. The EIR will examine project and cumulative effects and a reasonable range of alternatives to the project that may be capable or reducing or avoiding potential environmental effects that may be identified for the project. The topics of Agricultural and Forestry Resources, Mineral Resources, Population/Housing, and Wildfire will not be addressed in the EIR as these do not apply to the project.

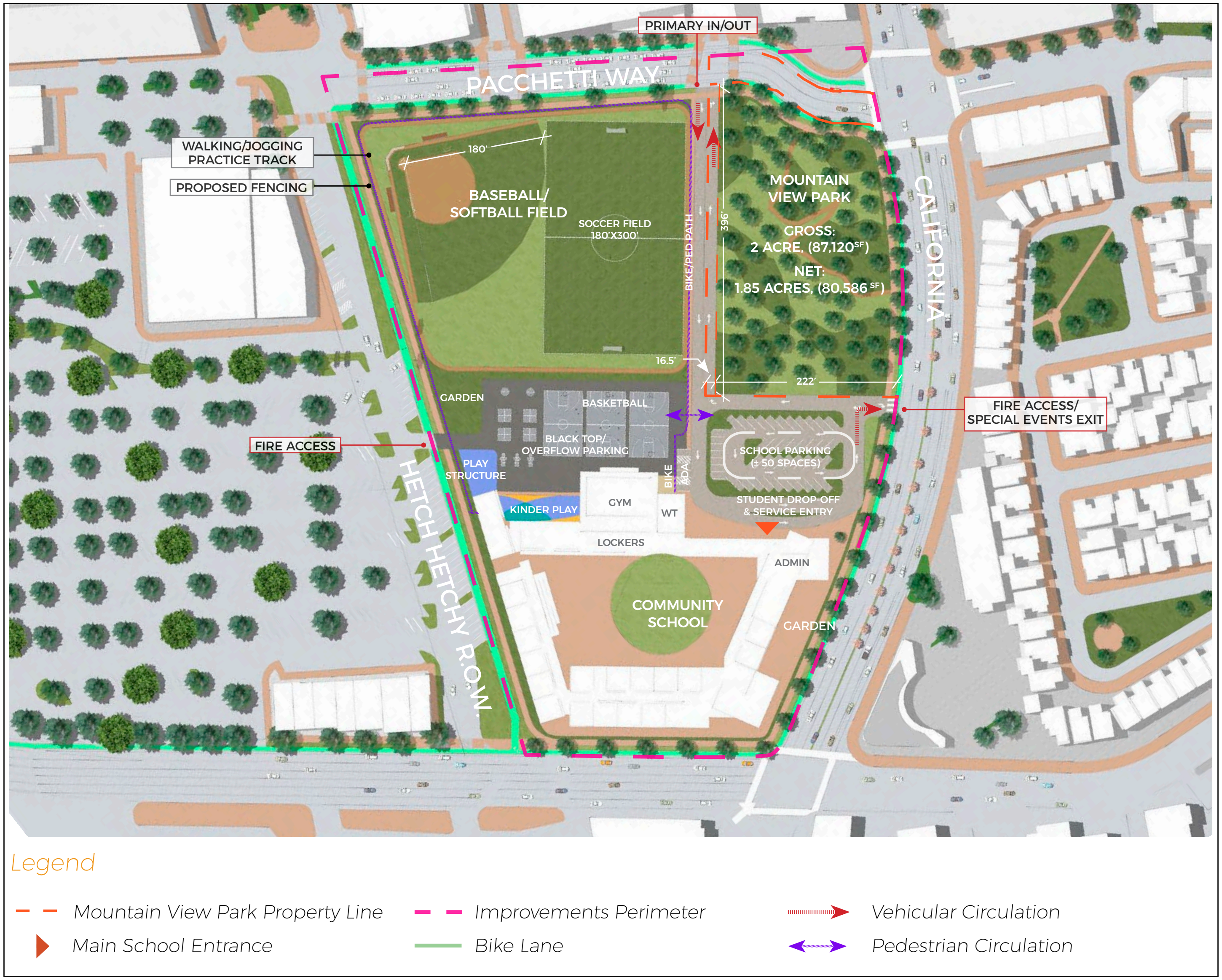
**SCOPING MEETING**: A scoping meeting will be held online Tuesday, July 26, 2022, at 6:30 PM. The meeting will be streamed via Zoom webinar. The link to the meeting is: https://us06web.zoom.us/j/86045748t74?pwd=cEZQQ2RmK2NVbWx6M2JtWitKQ3luUT09, Passcode: 5WFm03. This meeting will include a brief overview of the project and the EIR process and allow time for public comment.

Signature | Assistant Superintendent Business Services | 7/13/2022

Signature — Title — Date

**Los Altos School District**

This graphic shows school site plan layout with two playing fields NW of buildings. Future 2-acre City park adjacent to ball fields. Parking area east of future city park. School buildings at corner of California Street and Showers Drive.




SOURCE: Gelfand Partners Architects, 2022

Figure 1

**SITE PLAN FOR LASD 10th SITE COMMUNITY SCHOOL**

AMY SKEWES~COX
ENVIRONMENTAL PLANNING

**California Department of Transportation**

DISTRICT 4
OFFICE OF REGIONAL AND COMMUNITY PLANNING
P.O. BOX 23660, MS–10D | OAKLAND, CA 94623-0660
www.dot.ca.gov

August 10, 2022

SCH #: 2022070275
GTS #: 04-SCL-2022-01105
GTS ID: 27066
Co/Rt/Pm: SCL/82/21.6

Sandra McGonagle, Superintendent
Los Altos School District
201 Covington Road
Los Altos, CA 94024

**Re: Los Altos School District 10th Site Community School Project Notice of Preparation (NOP) for Draft Environmental Impact Report (DEIR)**

Dear Sandra McGonagle:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Los Altos School District 10th Site Community School Project. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system. The following comments are based on our review of the July 2022 NOP.

**Project Understanding**

The Los Altos School District is preparing a DEIR for a new school campus, to be located at the San Antonio Center shopping mall at the intersection of California Street and Showers Drive in Mountain View. The school may serve a range of grades and student populations over time. As the District serves grades Kindergarten through 8, the only format that is ruled out is high school. The four existing buildings on the site would be demolished and the parking lots and landscape areas thoroughly regraded, repaved, and replanted. The proposed school facilities that would be built on the site would include library, administration, and multi-purpose buildings that are planned for change and expansion. The facilities could serve up to 900 students, although the school might initially serve 600 students or less. The DEIR will evaluate a student population of 900 students.

**Travel Demand Analysis**
With the enactment of Senate Bill (SB) 743, Caltrans is focused on maximizing efficient development patterns, innovative travel demand reduction strategies, and multimodal improvements. For more information on how Caltrans assesses Transportation Impact Studies, please review Caltrans' Transportation Impact Study Guide (*link)*.

If the project meets the screening criteria established in the District's adopted Vehicle Miles Traveled (VMT) policy to be presumed to have a less-than-significant VMT impact and exempt from detailed VMT analysis, please provide justification to support the exempt status in alignment with the District's VMT policy. Projects that do not meet the screening criteria should include a detailed VMT analysis in the DEIR, which should include the following:

- VMT analysis pursuant to the District's guidelines. Projects that result in automobile VMT per capita above the threshold of significance for existing (i.e. baseline) district-wide or regional values for similar land use types may indicate a significant impact. If necessary, mitigation for increasing VMT should be identified. Mitigation should support the use of transit and active transportation modes. Potential mitigation measures that include the requirements of other agencies such as Caltrans are fully enforceable through permit conditions, agreements, or other legally-binding instruments under the control of the District.

- A schematic illustration of walking, biking and auto conditions at the project site and study area roadways. Potential traffic safety issues to the State Transportation Network (STN) may be assessed by Caltrans via the Interim Safety Guidance (*link*).

- The project's primary and secondary effects on pedestrians, bicycles, travelers with disabilities and transit performance should be evaluated, including countermeasures and trade-offs resulting from mitigating VMT increases. Access to pedestrians, bicycle, and transit facilities must be maintained.

- Clarification of the intensity of events/receptions to be held at the location and how the associated travel demand and VMT will be mitigated.

**Transportation Impact Fees**
Please identify project-generated travel demand and estimate the costs of transit and active transportation improvements necessitated by the proposed project; viable funding sources such as development and/or transportation impact fees should also be identified. We encourage a sufficient allocation of fair share contributions toward multi-modal and regional transit improvements to fully mitigate cumulative impacts to regional transportation. We also strongly support measures to increase sustainable mode shares, thereby reducing VMT.

**Construction-Related Impacts**
Potential impacts to Caltrans' Right-of-Way (ROW) from project-related temporary access points should be analyzed. Mitigation for significant impacts due to construction and noise should be identified. Project work that requires movement of oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans. To apply, visit: https://dot.ca.gov/programs/traffic-operations/transportation-permits. Prior to construction, coordination may be required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the STN.

**Lead Agency**
As the Lead Agency, the Los Altos School District is responsible for all project mitigation, including any needed improvements to the STN. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

**Equitable Access**
If any Caltrans facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion. As well, the project must maintain bicycle and pedestrian access during construction. These access considerations support Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users.

**Encroachment Permit**
Please be advised that any permanent work or temporary traffic control that encroaches onto Caltrans' ROW requires a Caltrans-issued encroachment permit. As part of the encroachment permit submittal process, you may be asked by the Office of Encroachment Permits to submit a completed encroachment permit application package, digital set of plans clearly delineating Caltrans' ROW, digital copy of signed, dated and stamped (include stamp expiration date) traffic control plans, this comment letter, your response to the comment letter, and where applicable, the following items: new or amended Maintenance Agreement (MA), approved Design Standard Decision Document (DSDD), approved encroachment exception request, and/or airspace lease agreement. Your application package may be emailed to D4Permits@dot.ca.gov.

Please note that Caltrans is in the process of implementing an online, automated, and milestone-based Caltrans Encroachment Permit System (CEPS) to replace the current permit application submittal process with a fully electronic system, including online payments. The new system is expected to be available during 2022. To obtain information about the most current encroachment permit process and to download the permit application, please visit https://dot.ca.gov/programs/traffic-operations/ep/applications.

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, or for future notifications and requests for review of new projects, please email LDR-D4@dot.ca.gov.

Sincerely,

Mark Leong

MARK LEONG
District Branch Chief
Local Development Review

c: State Clearinghouse

Gmail

**Amy Skewes-Cox <amysc@rtasc.com>**

# School Siting Guidelines/ Los Altos School District 10th Site Community School Project

1 message

**Andrea Gordon** <AGordon@baaqmd.gov> Mon, Jul 25, 2022 at 3:05 PM
To: "amysc@rtasc.com" <amysc@rtasc.com>
Cc: "smcgonagle@lasdschools.org" <smcgonagle@lasdschools.org>

Amy -

Per our conversation this afternoon, the link to the school guidelines is below:

https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/tools/baaqmd-school-siting-guidelines-pdf.pdf

Sincerely,

Andrea

Andrea Gordon

Bay Area Air Quality Management District

375 Beale Street, Suite 600

San Francisco, CA 94105

agordon@baaqmd.gov

415-749-4940

# NATIVE AMERICAN HERITAGE COMMISSION



**NAHC HEADQUARTERS**
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

July 15, 2022

Mr. Randy Kenyon
Los Altos School District
201 Covington Rd.
Los Altos, CA 94024

**Re: 2022070275, Los Altos School District 10th Site Community School Project, Santa Clara County**

Dear Mr. Kenyon:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

**Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

**1.** Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

**2.** Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

**3.** Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

**4.** Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

**5.** Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

**6.** Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

**7.** Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

**a.** The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

**b.** A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

**8.** Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

**9.** Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

**10.** Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

**a.** Avoidance and preservation of the resources in place, including, but not limited to:

**i.** Planning and construction to avoid the resources and protect the cultural and natural context.

**ii.** Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

**b.** Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

**i.** Protecting the cultural character and integrity of the resource.

**ii.** Protecting the traditional use of the resource.

**iii.** Protecting the confidentiality of the resource.

**c.** Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

**d.** Protecting the resource. (Pub. Resource Code §21084.3 (b)).

**e.** Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

**f.** Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

**11.** Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

**a.** The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

**b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

**c.** The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

**1.** Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
**2.** No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
**3.** Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
**4.** Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
  **a.** The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
  **b.** Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

**1.** Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
  **a.** If part or all of the APE has been previously surveyed for cultural resources.
  **b.** If any known cultural resources have already been recorded on or adjacent to the APE.
  **c.** If the probability is low, moderate, or high that cultural resources are located in the APE.
  **d.** If a survey is required to determine whether previously unrecorded cultural resources are present.

**2.** If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  **a.** The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
  **b.** The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

**3.** Contact the NAHC for:

**a.** A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

**b.** A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

**4.** Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

**a.** Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

**b.** Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.

**c.** Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Cody.Campagne@nahc.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
*Cultural Resources Analyst*

cc: State Clearinghouse

City of Mountain View

Public Works Department
500 Castro Street, P.O. Box 7540
Mountain View, CA 94039-7540
650-903-6311 | MountainView.gov

August 15, 2022

Sandra Bush
Superintendent, Los Altos School District
201 Covington Road
Los Altos, CA 94024
Email: SBush@lasdschools.org

**City of Mountain View Response to Notice of Preparation of an Environmental Impact Report Los Altos School District 10th Site Community School Project**

Dear Sandra Bush:

The City of Mountain View has reviewed the "Notice of Preparation of an Environmental Impact Report" letter, dated July 15, 2022. City staff recommend that the following items be included in the scope and content of the EIR.

**GENERAL**

1. Based on the City's current understanding, the City would be a responsible agency and the project would be required to obtain all applicable City permits (e.g., Zoning Permit from Community Development and Excavation Permit from Public Works) for the proposed project.

2. The EIR should analyze any conflicts the LASD project would have with the San Antonio Precise Plan and General Plan/Mountain View Greenhouse Gas Reduction Program. Additionally, though the impact may not be significant, the CEQA analysis should address any potential for the new school infrastructure to indirectly induce growth in the San Antonio area.

3. City staff are recommending that the joint use open space at the LASD site include synthetic turf and lighting. Per our recent discussion with the LASD team, these amenities should be included as part of the project description to determine the greatest environmental impact, with natural grass and no lighting also studied as an alternative. The auxiliary room/"min-gym" should also be included in the project description to determine the potential impact.

4. The City park adjacent to the joint use open space should also be included in the CEQA study.

5. A Utility Impact Study should be conducted to determine the impact of the school on the City's utilities.

a. The San Antonio Center Phase III UIS, 2580 California UIS, and Alma Recorder Tributary Area Alignment Study (Project 14-48) identify sewer deficiencies in the existing condition with projects along Sondgroth Way, San Antonio Rd, and Showers Dr.
b. The San Antonio Area Sewer Improvement Project (Project 17-50) has completed 100% design of Alternative 2 from Project 14-48. The project is currently undergoing easement acquisition with the City of Palo Alto.

6. The EIR should include a VMT analysis and a full Multi-modal Transportation Analysis per City's policies and demonstrate compliance with CMP VTA TIA requirements as the project is expected to generate 100+ net new peak hour trips. The VMT + MTA should include, but is not limited to the following:

   a. There are two main transportation conditions the City is focused on:
      i. Transportation conditions/impacts from the school operations that include parent circulation, drop-off, pick-up, student pedestrian, bicycle transportation, etc. (If district boundary is localized, VMT analysis may not be required). However, transportation operational analysis will be necessary to ensure safe circulation.
      ii. Transportation conditions/impacts from the school employees (jobs in MV) that should be addressed through VMT analysis to meet CEQA requirements

   b. The reports should provide clarification of the term "Community School". How does this differ from traditional public school in terms of transportation. Are there any district bus services, etc.?

   c. The City requests for the opportunity to review the EIR scope before the analysis commences.

   d. Mountain View Transportation Policy, Vehicle Mile Traveled
      i. Although the project is under State purview, the project is required to address Mountain View local land use regulations including standards for identifying potential environmental impacts. If the determination has not been made of the type of school, the VMT analysis shall study the most conservative scenario as a charter school.
      ii. Public Schools traditionally draw students locally and within a reasonable walking or bicycling distance. Please confirm the location or district boundary of the student catchment area.
      iii. For a local school, the VMT analysis should focus on the employment trips generated by the project. For a charter school, the VMT analysis should be for both student trips and employment trips. Because the adopted regional

average employment VMT baseline in Mountain View is 15.33, the threshold for employment trips is 13.03. The proposed site has an existing VMT of 15.49 which would require a 16% reduction of VMT to meet Mountain View's adopted 13.03 threshold.

iv. For a charter school, the VMT analysis should be for both student trips and employment trips. The VMT analysis should determine the reduction required to meet Mountain View's adopted 10.03 threshold.

v. The project is located within the TPA/HQTC Stop Buffers which will screen employment uses provided the project meets the following criteria:
   1. Location: In an area within a half mile of a major transit stop or high-quality transit corridor
   2. Density: Minimum gross floor area ratio (FAR) of 0.75
   3. Parking: No more than the minimum number of parking spaces required
   4. Displacement: Does not replace affordable residential units with a smaller number of moderate- or high-income residential units
   5. Consistent with Plan Bay Area, the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Transportation Commission

vi. The project may not meet the FAR of 0.75, which would then require subsequent VMT analyses.

vii. The project is located with the Transit Priority Area which means the project is with 0.5 miles of a major transit stop and a High-Quality Transit Corridor which indicates a fixed bus route service with frequency of 15 minutes or less during peak travel. These are optimum conditions for multimodal transportation and utilization of these available options will reduce the project's employment VMT. Additionally, strong pedestrian and bicycle networks are available on all the surrounding streets and to/from the TPA/HQTC and serving the project site.

viii. To reduce the VMT, the project can propose VMT mitigation including but not limited to the following VMT mitigation strategies:
   1. Improving the multimodal transportation network which could include upgrading or implementing bicycle lanes;
   2. Improving end of bike facilities such as onsite showers and lockers;
   3. Improving the pedestrian network by upgrading existing pedestrian facilities surrounding/serving the site;
   4. Implementing traffic calming, etc.;
   5. Improving/upgrading transits facilities;
   6. Reducing vehicle parking or increasing bicycle parking; and
   7. Implementing TDM measures designed to incentivize and promote transit use, bicycle use, etc.

e. Site and off-site operations
   i. The proposed site is designed to accommodate commercial retail traffic. A proposed school on this site has significantly different travel patterns which need to be addressed, for example
      1. Schools have an AM peak hour, Afternoon peak hour, and a lesser PM evening peak hour. Typically, schools generate substantial drop-off (and pick-up) trips which create long queues and congestion.
      2. The afternoon peak also generates substantial congestion and long queues during end of school day pick up hours.
      3. The evening peak includes trips generated from after-school activities, as well as the end of the workday for school employees.
   ii. Employee regional travel served by I-280, US-101, and Route 85, as well as El Camino Real.
   iii. To ensure the safety of the students, the project should include a well-designed drop off and pick up to minimize confusion.
   iv. The project is accessible from multiple frontages including:
      1. California Street (35mph)
      2. Pacchetti Way
      3. Showers Drive
      4. Hetch Hetchy ROW
   v. The closest signalized intersections providing access to the site and connects nearby residential neighborhoods to the project. The signal operations (including queuing and level of service analysis) and pedestrian crossings should be evaluated for potential improvements or upgrades to accommodate the walking or biking students. All analyses shall include AM, Mid-Day (during school exit time), and PM analyses. The analyzed intersections shall include, but not limited to:
      1. California/Pacchetti - main access
      2. California/Showers
      3. California/San Antonio
      4. California/Ortega
      5. California/Rengstorff
      6. El Camino Real/Showers
      7. El Camino Real/San Antonio
      8. Other intersections where the project will add 10 or more peak hour vehicles per lane to any intersection movement.
   vi. The study shall include signal warrant analyses of currently unsignalized intersections: Warrants shall include, but not limited to the following intersections:
      1. Showers/Latham,

2. Showers/Gabriel
3. Other uncontrolled intersections where the project will add 10 or more peak hour vehicles per lane to any intersection movement.

vii. The report shall identify which existing and proposed crosswalks fall under the 600-foot distance of the school per CA MUTCD. The project will be required to convert all these crossings to yellow high visibility ladder crossings, including school signs. The project will also be required to implement enhanced signs and raised crosswalks at uncontrolled school crossings, including but not limited to: Showers/Gabriel, Pacchetti/mid-block north of California

viii. The report shall include a recommendations of school zone and reduced school speed limits for the latest CA MUTCD and CVC regulations. This would include conceptual level school signage and markings.

ix. The report shall include recommendations for crossing guards per CA MUTCD.

x. Vehicle queuing should be evaluated at the signalized intersections during peak travel. Entry Queuing shall also be analyzed at the main driveway and the impacts on California/Pacchetti shall be identified and recommend resolution

xi. The study shall also analyze the potential need for the project to extend the median on California all the way to Showers to inhibit mid-block turns and excessive conflicts. As part of this analysis, the project shall discuss the impacts of an extended median on circulation for nearby businesses, especially those on the north side of California, between Pacchetti and Showers.

xii. There is a great potential for student drop-off in the surrounding parking lots and on fronting streets (i.e., Showers and California) which can be hazardous. To the extent possible the project should be designed to discourage drop-offs (and pick-ups) at inappropriate locations and encourage drop-offs (and pick-ups) at safe locations on-site only. Include in the report any proposed measures that will be implemented to address this potential issue, including fencing and site access points

xiii. Include a full description and evaluation of the drop-off and pick up operations of the school traffic during peak school operations including traffic operations at the closest intersection Pacchetti and California and include the park garage operations (unsignalized intersection at parking garage) with the school traffic along Pacchetti Way.

xiv. Student pick-up – during typical pick-up operations, parents arrive early and create operational conflicts as they look for waiting areas, how will the project accommodate this traffic?

xv. All proposed driveways should be evaluated for queuing and circulation and will require encroachment permits from the City of Mountain View as well as any other proposed public improvements. This document will be used to ensure all driveways are operating safely and do not result in any operational conflicts. Note that only the driveway off Pacchetti will be permitted to minimize impacts and conflicts on California.

xvi. The study shall include an analysis of turning radii at the project corners, including the one at the intersection of California/Pacchetti. This analysis shall include curb radius reduction recommendations to improve student crossing safety.

f. Congestion Management Program Conformance

i. This project is required to meet the requirements of the CMP program which includes intersection analysis for designated CMP intersections, evaluation of regional transportation, and multimodal evaluation under all scenarios. See VTA Guidelines for further direction.

7. The following requirements shall be applied to the project, and should be considered with the EIR:
   a. Per previous discussions with the District, the two public frontages (California Street and Showers Dr) shall be constructed per the San Antonio Precise Plan. The analysis should reflect these improvements.
   b. To minimize offsite conflicts, provide safe operations, and reduce impacts to public street parking, trash, freight, delivery service, passenger loading, and circulation must be accommodated onsite and must be designed in a manner and location that will discourage on-street use. Show all loading areas and circulation.
   c. At street corners of controlled and uncontrolled intersections, the site shall be compliant with Pedestrian and Vehicular Triangles of Safety per the latest City Public Works Standard Details. The Project will be required to remove or modify all objects, including, but not limited to landscape, hardscape, poles, post, bollards, signs, mailboxes, planters, retaining walls, seat walls, bicycle racks, partitions, structures (including columns), parking stalls, etc. that are not compliant with safety triangle height and clearance requirements. Artwork, benches, tables, chairs, and planters cannot be installed in this safety area. This requirement shall apply to the corners at the following intersections: California Street at Pacchetti Way, and California Street at Showers Drive.
   d. At all driveways, including driveways that are adjacent to the project site and not part of the project, the driveway shall be compliant with Pedestrian and Vehicular Triangles of Safety per the latest City Public Works Standard Details. The Project will be required to remove or modify all objects, including, but not limited to landscape, hardscape, poles, posts, bollards, signs, mailboxes, planters, retaining walls, seat walls, bicycle racks, partitions, structures (including columns), parking stalls, etc. that are not compliant with safety triangle height and clearance requirements. This requirement shall apply to all driveways connecting to public streets.

e. All egress points to public streets or public easements shall be STOP-controlled with proper signage and markings to control conflict points with pedestrians, bicyclists, and vehicles as they enter a public roadway and therefore improve safety.
f. To minimize intersection conflicts, allow for braking distance, provide queueing space, and improve traffic safety and operations, driveway distances from nearest curb returns shall be a minimum of 150' away, or as otherwise directed by the City Traffic Engineer.
g. Upon submittal of the initial improvement plans, the applicant shall submit traffic control plans for any off-site improvements or any work that requires temporary lane closure, shoulder closure, bike lane closure, and/or sidewalk closure for review and approval. Sidewalk closures are permitted only if reconstruction of sidewalk necessitates temporary sidewalk closure. In these instances, sidewalk detour should be shown on the Traffic Control plans. Traffic control plans shall be prepared in accordance with the latest edition of the California Manual of Uniform Traffic Control Devices (CA MUTCD) and the latest City standards.
h. To improve accessibility of project generated pedestrian traffic, intersection curb ramps shall be modified to be two-directional ramps.
i. All new access ramps shall comply with the Americans with Disabilities Act (ADA) requirements. Existing nonconforming access ramps shall be reconstructed to comply with the current ADA requirements.
j. Proposed driveways shall be consolidated as directed by the City Traffic Engineer to minimize conflicts between pedestrians and bicyclists with vehicles entering and exiting the site. All access (ingress and egress) shall be limited to Pacchetti Way.
k. The project is required to submit a photometric analysis of the locations as determined by the City Traffic Engineer. The analysis shall show all existing or proposed new streetlights (show height, arm length, and location) and shall calculate the minimum, maximum, average illuminance values, as well as uniformity ratios for each crosswalk shown separately. Project will be required to install new or modify existing streetlights to ensure locations are compliant with minimum requirements per the City's latest standard details. (City Standard Detail E-1A/E-1B). This applies to the intersections of: California Street at Pacchetti Way; and California Street at Showers Drive.
l. New streetlights shall be installed at the midblock crossings, one on each side of the street, as necessary. The design, spacing, and placement of the new streetlights shall be to the satisfaction of the City Traffic Engineer. This will be required of all uncontrolled school crossings.
m. Convert existing crosswalks to high-visibility thermoplastic crosswalks with advance stop bars or yield lines and appliable signs to the satisfaction of the City Traffic Engineer. Any conflicting markings or signs must be removed or relocated as directed by the city during the off-site plan review process. Convert all crosswalks at

Showers/Gabriel, California/Showers and California/Pacchetti to yellow high visibility ladder crosswalks.

n. To improve safety for the increased project pedestrian traffic, convert existing crosswalk to a high-visibility thermoplastic crosswalk with pedestrian activated LED-enhanced pedestrian crossing signs. The design of the enhancements shall be to the satisfaction of the City Traffic Engineer.
    i. The following crosswalks might be school crosswalks. All uncontrolled school crosswalks will be required to be improved accordingly: Showers/Gabriel; Pacchetti/mid-block near Freedom Lane
o. The existing intersection/project frontage shall be improved with green bike lanes/bike crossings/skip boxes to accommodate increased vehicle/bicycle trips and to improve bicyclist safety.
p. Designer and contractor must be aware that the signal equipment at the project corner must remain at the existing grade and intact. If any of the signal equipment (e.g., poles, cabinet, pull boxes, conduits, etc.) is touched (e.g., moved or damaged) by the project during any phase, it shall be redesigned and upgraded to the latest standards by the project to comply with current State and City requirements. Supplementary equipment will also be needed to be upgraded as needed. Additionally, if new curb ramps result in inaccessible pedestrian push buttons, new ped posts with new push buttons may be needed to conform to CAMUTCD design standards. Note that due to system compatibility if one pedestrian push button is changed, all others in the system/intersection must be upgraded as well.
q. Project must upgrade traffic signal equipment (e.g., cabinet, processor, controller, video detection cameras, etc.) to the current City Standards.
    i. Increase in school peak hour traffic will likely result in the need for updated signal operations. The project shall fund all changes and hardware upgrade necessary for improvements.
r. All striping damaged as part of construction and pavement work shall be replaced with thermoplastic striping to the satisfaction of the City Traffic Engineer.
s. Due to the project proximity to a traffic signal, the project Contractor shall maintain a contract with the City's signal maintenance contractor (Bear Electrical Solutions) at all times during construction. If any damage occurs to the traffic signal, the project contractor shall be responsible for all repair costs (labor and material) and coordination through the City's signal maintenance contractor. Any damages shall be reported immediately and shall be requested as emergency repair. All repairs shall be consistent with the City's contract and agreements with the signal maintenance contractor. Contractor shall provide a copy of the executed contract prior to issuance of any excavation or building permits. Contract shall be valid for the entire duration of the project. Contractor shall be responsible for all specialized inspection costs as directed by the City Traffic Engineer.

t. The project will be required to implement all school related striping and signage, including but not limited to school speed limits, school zone signs, school speed limits. The project may be required to construct a median extension on California Street and lane modifications. The project would also be required to update corner radii for both project intersections.

If you have any questions, please contact me at (650) 903-6311.

Prepared by: Approved by:

Renee Gunn

Gabrielle Abdon
Associate Civil Engineer

Renee Gunn
Senior Civil Engineer

cc (w/o attach): PWD—Cameron, APWD—Arango, PCE—Byrer, SCE—Gunn, File (LASD)

Gmail

**Amy Skewes-Cox <amysc@rtasc.com>**

# Fwd: Requesting EIR for 10th Site Community School LASD

1 message

**Sandra Bush** <SBush@lasdschools.org> Mon, Jul 25, 2022 at 9:59 PM
To: Amy Skewes-Cox <amysc@rtasc.com>, Randy Kenyon <rkenyon@lasdschools.org>

Begin forwarded message:

**From:** Sonya DeAngelis <sndeangelis@gmail.com>
**Date:** July 25, 2022 at 9:48:49 PM PDT
**To:** Sandra Bush <sbush@lasdschools.org>
**Cc:** Ron DeAngelis <rjdeangel@gmail.com>
**Subject: Requesting EIR for 10th Site Community School LASD**

Hi Sandra,
We own property very close to the proposed 10th site project. We received a letter (Notice of Preparation) regarding the Environmental Impact Report.
We would like to request a copy of the draft EIR when it is available.

Thank you,
Ron & Sonya DeAngelis

Sent from my iPhone

Gmail **Amy Skewes-Cox <amysc@rtasc.com>**

# FW: 10th Site Community School LASD

1 message

**Sandra Bush** <SBush@lasdschools.org> Mon, Jun 5, 2023 at 8:00 AM
To: Amy Skewes-Cox <amysc@rtasc.com>

**From:** Nancy Morimoto <nancy94040@gmail.com>
**Sent:** Friday, July 29, 2022 12:29 PM
**To:** Sandra Bush <SBush@lasdschools.org>
**Cc:** Erik Walukiewicz <ewalukiewicz@lasdschools.org>
**Subject:** 10th Site Community School LASD

Dear Erik and Sandra,

As a passionate supporter of the 10th site at this location, I'm very eager for all the details to come together for maximum safety, convenience and aesthetics, for the school community as well as my neighborhood. I'm sorry I was unable to attend the scoping meeting on July 26th.

Here are my initial comments on the Notice of Preparation of the EIR in the area of transportation safety and traffic mitigation:

**Potential Problems:**

Pacchetti Way is a very narrow street, and despite my earlier lobbying, sadly designed more as a shopping center driveway than a multi-modality road. It is not well suited for sharing the road with bicyclists. In fact, the sidewalk ends in the Trader Joe's area and it narrows to being practically a loading dock alley. Also, many school-bound cars coming down San Antonio Road from Los Altos will turn right into the "greenway" (with the open space and dog park) as a shortcut to driving down to California to access the school entrance. These roads also were not designed with a separate bike lane, despite its intended use as a bike route. All these narrow roads should be kept as free as possible from extra traffic for those who may be walking or bicycling from Los Altos.

I envision a lot of gridlock with the one choke point of the primary in/out being right on Pacchetti. Adding to the problem is the fact that this is also where there is a main entrance to the big parking structure.The storefronts are largely still empty and the movie theater is fairly sleepy right now, but as stores eventually fill the area, it will become much busier. Also it is where there used to be (and will likely be again) big charter busses dropping off and picking up workers who live in San Francisco and work at the offices on the other block.

I also can imagine parents dropping off and picking up students all along the entrance road between the soccer field and the park, hindering the flow of traffic and potentially having students darting across the street for their rides.

**Potential Solution:**

I strongly suggest you study alternate traffic flow ideas that would keep cars more on the "higher vehicle capacity" roads and keep those smaller access roads mainly for bicyclists and pedestrians. One idea is to make the "Fire Access/Special Event Exit" a primary entrance for those coming down Showers and making a left onto California and a left into the school. You would then add a California exit driveway close to the drop off circle at the corner of the administration building, probably requiring a right turn only exit to keep traffic flowing. Most of our schools have this separate entrance and exit configuration and it works reasonably well.

Those coming on California from San Antonio would be encouraged to use the currently planned larger loop entrance, by turning right onto Pacchetti and then taking an immediate left into the school driveway. They could then leave by continuing right on California using that new exit. If they had errands at the shopping center or wanted to go to the fitness center, they would simply use the center entrance from Showers. If they wanted to go back the way they came, they could complete the park loop and turn right on Pacchetti in order to turn left onto California. This keeps the bulk of the traffic using San Antonio Road or Showers Drive to California Street instead of Pacchetti Way and the other "village center streets," making those smaller streets much safer for pedestrians and bicyclists.

One potential drawback of having two entrance and exit areas is the "merge" of drop-off traffic coming from California and traffic coming from the planned access road from Pacchetti, as they make their way to the drop- off circle lane(s). One way to decrease the traffic involved in the merge is to let the parking spaces be accessed earlier from the California entrance driveway. That might also encourage drivers wanting parking spots to use that more "car friendly" access route. There would also be a bit of cross traffic from those wanting to complete the big loop with those entering from California, but I still think this is preferable to the likely gridlock and mix of bikes and cars at the current primary in/out on Pacchetti.

Thank you for all your hard work that will be involved in making this a fabulous school site. I'm looking forward to partnering with the district as you proceed with this important work.

Sincerely,

Nancy Morimoto

Former 10th Site Committee Member

Librarian, Egan Junior High

115 Whits Road, Mountain View

**Date:** July 23, 2023

**To:** Mr. William Savidge, San Rafael City Schools

**Regarding:** NOP Supplemental EIR San Rafael High School

**From:** Mary Maurer (108 Mission Ave) On Behalf of MARA – Montecito Area Residents Association

**CC:** Sherna Deamer, President of MARA

Dear Mr. Savidge,

As an adjacent resident to San Rafael High School and member of MARA, I am responding, on behalf of MARA, to the request for comment regarding scope and content to be used in the drafting of the Supplemental EIR. To start, I would like to reiterate the overarching statement MARA provided in response to the previously completed EIR –

**MARA supports the effort to update and improve SRHS facilities for the students of San Rafael and provides the following input regarding the proposed project.**

### Specific to the scope defined in the project description –

- **The New Aquatic Center** – 50-foot poles with low level lights are represented in the project description
    - **Question:** Is this height necessary to adequately support the swimming facilities? What is the calculated coverage area for the lights at that level? Will lights at that level be visible by and impact neighboring residents? In the Existing Condition section, the existing campus is defined as one to three stories in height. A 50-foot pole would then exceed the height of the school
    - **Question:** What is the proposed noise management program for the new facilities? Will there be a mandated maximum decibel level and time window for use of the sound system (including buzzer / timer)? Currently the buzzer / timer sounds penetrate the neighborhood
    - **Question:** Will rules be applied and managed regarding the use of the sound system for music and other activities? Increasingly music is played at very loud levels during athletic practices
- **Modernization of the Gymnasiums –** Not stated are the scope of the changes to the gymnasiums
    - **Question:** Will the modernization include better air circulation and a new sound system? Currently doors are regularly opened during sporting events resulting in the sound system and buzzer / timer penetrating the neighborhood
    - **Question:** Is additional work required to mitigate the flooding of the gymnasiums during heavy rain storms – additional work beyond the project currently underway in the small parking area in front of the small gymnasium
- **New Artificial Turf for Baseball and Softball Fields** – The physical scope of the area represented by this component is not clear
    - **Question:** Does this component include the assessment and improvement of drainage – particularly in the outfield of the baseball field, the foul territory adjacent left field, and beyond the outfield "wall"? That area is regularly "swampy" during winter months
    - **Question:** Does the scope of this component also include the refurbishment of the area surrounding the fields – dugouts, batting cages & seating areas?

- **Question:** The NOP specifically references no lighting for either the baseball or softball fields – what about the existing lighting at the baseball batting cages? Will that be removed? If lights are not necessary for the fields, are they necessary for the batting cages? Currently, one bank of those lights shine towards Mission Ave
- **Question:** What are the access control plans for these facilities? Will these newly upgraded facilities be open to the community? If not, what is the access control plan? Who will be responsible for management?

- **Landscaping, grading etc. –** Does the scope of the area represented by this component include the landscaping along the fence on Mission Ave up to Embarcadero?
  - **Question:** Many trees have been removed due to disease and fire hazard, is an adequate replacement of those trees / landscaping along Mission Ave included in this component? The removal of the trees highlights the "eyesore" Athletic Shed, lights from the batting cages shining on houses on Mission Ave and more collective noise from the facilities

## In general, regarding the overall scope of proposed project –

- Continued modernization of the athletic facilities will drive more use of those facilities, as has been demonstrated by the modernization of the Stadium. Following the pattern set by the Stadium, we anticipate that internal use (school / district) of the facilities will increase moderately but the most substantial increase in use will come from non-school groups, thus nullifying the flat or stagnate growth in student enrollment projected over the next five years. For example, CYO basketball, Swim Marin
  - **Question:** Does the scope of this project include:
    - The tennis courts and surrounding asphalt area?
    - The baseball storage unit?
    - The "Athletic Shed" bordering Mission Ave?

    If not, which EIR specifically covers these areas?

  - **Question:** What governing rules will be set regarding use of these modernized facilities and how will these rules be communicated to the users of the facilities? Utilizing our collective experience with the Stadium going "live" –
    - Attendee access and parking for events at the facilities needs to be clearly communicated, "clear path signage" posted and for large events, one or more individuals available to monitor and direct car and foot traffic
    - Decibel levels for sound systems need to be set and managed. Ideally with stop gaps in place preventing a user from over-amplifying their event
    - Hours of operation need to be defined and managed
    - Key access to the facilities, lights and sound systems needs to be restricted

    MARA looks forward to working with the school and district in defining acceptable solutions for the community and for the activities

  - **Question:** Who will be monitoring the compliance with the "rules of use" for these facilities? For school / district events? For non-school / district events? How will violations of these rules be handled?

- The prior EIR regarding the Stadium Project and Future Master Plan surfaced a number of issues that are also intensified by the completion of these projects – Parking, Traffic, Safe Routes to School. While the current NOP for Supplemental EIR identifies these as out of scope, the insufficient management of the solutions defined in the prior EIR make them very relevant to this Supplemental EIR.

  With the volume of visitors to campus likely to increase during non-school hours as a result of these improvements and prior solutions to mitigate the previously identified issues not effective, Parking, Traffic and Safe Routes to School must be addressed through this project design

  - **Parking:** Where will individuals park who are utilizing these new modernized facilities? How will these parking options be communicated? How will the options be managed and enforced? Is there an expectation that the asphalt area that was intended for "temporary teacher / administration parking while construction was being completed" be used permanently?
    - If the intention is that the asphalt area is to be "limited use only" 7/24 – then an electronic, auto closing, access gate would be more effective at minimizing unauthorized use. The current access control methods are ineffective and result in unauthorized use and unwanted activities
      - The gate to the asphalt area is regularly left open – for days at a time. During these periods, it is not uncommon for gates to the fields to be open – opening the door for the type of activity that occurred several years ago with someone doing "donuts" on the baseball field
      - When the gate is open, cars and individuals linger in the asphalt area. It is not uncommon for "donuts", racing, and other activities to occur
      - Ineffective management of the access control this past academic semester resulted in "visitors" during the school day conducting what appeared to be drug deals out of the trunk of their car
    - If the intention is that the asphalt area is to be used permanently then this or another EIR needs to address the items below, as perpetuating the suggestion that there are limited cars using the asphalt is false. Further, permanent use of the asphalt for parking is inconsistent with the commitment communicated to the neighborhood regarding post construction use
      - Actual volume of cars entering and exiting the lot – original design was for limited use. In actuality that occurred for a limited amount of time at the start, but is no longer the case. Access controls and management mechanisms that were initially defined might have been acceptable for a limited number of vehicles utilizing the asphalt area for parking but those controls very quickly became irrelevant as the number of cars using the area greatly exceed defined and communicated levels
      - Defined maximum capacity of parking spaces – currently, when there are multiple events or one large event, cars park anywhere that they can fit – grassy areas, the hill by the rock, the dirt between the fence and the street by the entry, etc. – not respecting the fire lanes or reasonable measures of safety
      - Ingress and egress – currently one lane accommodates both entry and exit. This results in accidents and near accidents, cars reversing onto Mission Ave (into traffic) traffic bottlenecks when cars queue to enter as cars attempt to exit – a lot of horn honking and screeching of tires

- Slope of the entry / exit to the lot provides limited view of Mission Ave. Again, this results in accidents and near accidents, cars reversing onto Mission Ave (into traffic) traffic bottlenecks as cars queue to enter as cars attempt to exit – a lot of horn honking and screeching of tires
- A stop sign at the exit of the driveway to encourage cars to stop before entering traffic on Mission Ave
- A defined plan for large vehicle entry / exit – should school buses, shuttle busses, etc. park on the asphalt? Should the buses enter the lot to drop off players? Currently most buses / bus drivers are unable to navigate the tight entry resulting in damage to the bus, the gate and / or the front yard of homes closest to the gate
    - NOTE: This should also be taken into consideration for the planned demolition and construction activities
- A defined plan for use during school hours, for after school activities and for weekend and other program use. Including a clear plan for administration, management, and violations – individual(s) responsible for monitoring use, towing vehicles, and enabling access (locking / unlocking); instruction regarding how to retrieve cars locked in
- A revised design for the asphalt area which accommodates school athletic activities adjacent to and in the asphalt area – for example, the viewing area for a tennis match is a parking space. Thus, attendees on foot are competing with cars for parking spaces. Or lacrosse players who are practicing / by throwing the ball against the wall of the health building (scheduled for modernization) while standing on the asphalt dodging the cars that are constantly entering and exiting the lot

- **Traffic:** As the asphalt area has not been "restricted use", the volume of traffic entering and exiting on to Mission Ave is far greater than was identified through the prior EIR. As a result of this wider use, traffic on Mission Ave has also increase and is particularly heavy at start / brunch / lunch / end of school, and when the athletic facilities are in use (weekdays and weekends) – from Union to Embarcadero. Mitigation measures identified in the prior EIR have not been successful – in part due to, what appears to be management; and in part due to, what appears to be a change in expected use for the asphalt area
    - The issues previously identified through the traffic study for the prior EIR continue to be issues. Parking in red area in front of gymnasiums (both sides of the street) for pick up and drop off, not adhering to traffic signs (stop signs and no U Turn signs), etc. Solutions to mitigate the originally identified issues need to be re-addressed. The added volume of cars and visitors resulting from the modernized facilities are expected to exacerbate the current situation
    - Parents are parking in front of homes / driveways on Mission Ave (specifically between Jewell and Belle) for student / athlete drop off and pick up – students / athletes then walk through the asphalt lot to / from facilities. This again, creates a scenario where people are competing with cars in the asphalt area

    - Students are utilizing Mission Ave for racing and showing off their cars, driving in the middle of the road – and gunning loud engines.  Frequently there is screeching tires as the cars exit the asphalt area to engage in these activities and / or concluding their activities in the asphalt area
    - When the asphalt area is used on weekends for parking for the "other activities" high volumes of cars are regularly entering and exiting resulting in high traffic volumes on Mission Ave
- **Safe Routes to School:** The prior EIR addressed the need for and expressed a commitment for, a Safe Routes to School pathway on Mission Ave between Embarcadero and Belle.  This pathway is important for students who walk down Mission Ave, cross country and track teams who regularly run "sprints" up the hill, and for visitors to the athletic facilities.   The absence of a pathway results in students and visitors walking in the middle of the street.  With the increased traffic levels, this becomes more of an issue
    - This was seemingly included in the last EIR yet no action has been taken.  Discussions have occurred periodically regarding this pathway as a "proposal" during the quarterly site committee meetings.  No action has been taken as of the last meeting

Thank you for the opportunity to provide input regarding the proposed capital improvements.  We look forward to working with the school and the district in refining the scope, boundaries, and implementation of the projects.

Respectfully,

Mary Maurer & MARA

# APPENDIX B
# SCOPING MEETING COMMENTS

Search all conversations

Compose

Mail

Inbox 44
Starred
Snoozed
Important
Sent
Drafts
Spam 283
Trash
[Gmail]Trash 3
A Belvedere Flood P... 2
A Branson School 2020
A Los Altos School 2... 1
A Upper Toyon 2021
Admin 2022
Warranties and other it...
Administration 2021
AEP 1
Amy Personal 21
Amy Work 7
Belvedere Flood Control ...
Berkeley Unified Schools...

Chat

Spaces

Meet

New meeting

My meetings

# FW: 10th Site Community School LASD

External Inbox ×

**Sandra Bush**
to me, Randy

Good afternoon Amy,

See below. As I receive emails re the 10th site, I will forward them to you and Randy and keep an electronic fold
them at this time.

Thanks,
Sandra

---

**From:** The UPS Store #2847 <store2847@theupsstore.com>
**Sent:** Thursday, July 21, 2022 11:13 AM
**To:** Sandra Bush <SBush@lasdschools.org>
**Subject:** Re: 10th Site Community School LASD

Hello Sandra,

I'm a business owner located near this site. I don't have any comments but I'd like to be kept aware of the progr

Thank you,
Dennis

---

CONFIDENTIALITY NOTICE: The information contained in and accompanying this communication may be privileged or confidential and
this communication please delete and destroy all copies immediately.

Reply Reply all Forward

Message sent

# APPENDIX C
# AESTHETICS AND LIGHTING BACKGROUND INFORMATION

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CONSULTING ENGINEERS

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# Lighting Analysis for
# Los Altos School District Site No. 10

**Appendix A**

MUSCO Sports Lighting – Los Altos HS Sport Field Illumination Report

Date: 05/18/2023

Prepared by
Jeffrey H. Ansley
Electrical Engineer, PE
Natron Resources, Inc

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**Los Altos School District Sports Lighting**
LASD is planning on installing sports field lighting for a combined baseball/softball, soccer field and small practice field.

**General Discussion / Outdoor Sports Lighting:**
The potential environmental impacts of outdoor sports lighting are generally evaluated as combination of "light trespass" and "discomfort glare". Light trespass is defined as light spilling onto adjacent properties, differing from intended purpose and becoming a visual annoyance. Glare is defined as the visual discomfort experienced by an observer but can also be the contrast brightness of the light source.

Visual characteristics of outdoor sports lighting may additionally be considered as being objectionable to some include if the sports light poles either individually or cumulatively block a major view corridor. However, for this site, the poles would not have a significant visual impact.

**Sports Lighting Design Criteria:**
The design of the proposed sports lighting system should provide light levels in accordance with recommendations of the Illuminating Engineering Society of North America (IESNA) RP-6-22 *Current Recommended Practice for Sports Lighting*. Using the IESNA criteria, it is recommended that average illuminance in footcandles (fc):

| | |
|---|---|
| Baseball/softball field: | 30 fc |
| Soccer field: | 30 fc |
| Practice field: | 20 fc |

**Regulatory Environment:**
The City of Mountain View has an Ordinance No. 18.13, December 2013 which defines the collocation to residential properties and position of light for sport structures, and addresses only sport courts, not athletic fields.

The regulation mention the lighting to be directed downwards, and to only illuminate the courts and not to illuminate adjacent property, but it does not place limits to property line bright levels. This is typical of most jurisdictions nationwide. Currently, there is no legal or uniformly accepted definition of light trespass. Commonly, the term is employed in reference to unwanted light at the property line, disturbing the tranquility of an adjacent property owner.

For example, San Diego County that has an ordinance (Ordinance No.5933, November 19, 1980) dealing with light trespass. This ordinance was not intended to set limits on public sports lighting facilities. The ordinance places a limit of 0.02 fc – equivalent to "bright moonlight", on the horizontal and vertical planes at points 5 feet inside the property line. The illumination the moon could technically provide is about 0.03 fc (exactly full moon, directly overhead), but that

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what most people would consider to be "full" probably averages half that at most, around 0.015 fc. The San Diego limit therefore restricts artificial light levels to the same intensity produced in the environment naturally.

Another reference is the City of Walnut Creek that also has a standard that sets a maximum limit of 1.0 fc for trespass light at the property line. This value is consistent with another source for environmental lighting, namely street lighting. Illumination of residential streets vary widely but can be found from <0.01 to >1.0 fc as measured on pavement.

California legislature has been working on outdoor lighting issues, including "dark sky" issues, and does consider such in part of the 2022 Energy Efficiency Building Standards, and Cal Green, but those standards do not include issues of light trespass from sports lighting, which is listed as an exempt category.

From recent experience it has been found that a 1.0 fc limit is too high to properly address the spill light impact in residential neighborhoods; that is, it would produce lighting impacts that would disturb the tranquility of adjacent property owners.

The potential for light trespass can be analyzed by computing lighting intensity (illuminance) on horizontal and vertical planes at various locations of concern and comparing the result to the ambient conditions. For the project site, due to its suburban character, the natural ambient nighttime conditions are like those of bright moonlight.

The most feasible maximum value of trespass light to achieve minimal neighborhood impact would be equal to, or less than, 0.2 fc, making the resulting illumination similar to that which would be created by residential streetlights.

**Criteria for Trespass Light and Glare**

For trespass/spill light mitigation, the maximum horizontal and vertical illumination at the property line of homes should not exceed 1.0 fc. While this value is relatively low, the more important consideration for the impact on the neighborhood is the glare produced by the field lights. Glare represents the brightness of the observed light sources.

For glare, the maximum value measured at 6 feet above ground, at the property line, in the viewed direction of the sports field, should not exceed 9,000 – 10,000 candelas (cd). There are no recognized standards for glare values; data are available pertaining to the discomfort level experienced by the observer. The value of 9,000 – 10,000 cd is a value known by professional lighting experience to cause little to no discomfort to the observer and would result in very minimal impacts of spill light into homes, or outdoor areas.

**Proposed Lighting Plan for Soccer Field, Baseball Field and Small Practice Field**

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**Major Considerations**
Major considerations in the design of the sport field lighting systems include illumination levels, pole heights and position; light output of lamps; optical control of fixtures and glare shielding; ball check lighting (up light); and proximity to surrounding land uses and residential neighborhoods.

**Site Conditions**
The area to the north side of the sports field would be a future city park and beyond the park are two-story residences on level ground, 360 ft. from the from soccer field outer line.
The west side of the sport fields consists of a multi-story parking lot building adjacent to a 6-story hotel, around 80 ft. from the field outline. This represents an area of spill light or glare concern.
The area to the south side of the sport fields, approximately 120 ft. from the outer line of the baseball field is a fitness center that would be demolished and does not represent an area of spill light or glare concern.
The area to the east side of the sports field is the play area of the proposed new school and does not represent an area of spill light or glare concern.

**Preliminary Site Plan**
As illustrated in the Electrical Site Plan, the computer predicted results for the lighting of the soccer field, baseball/softball field and practice field are indicated in MUSCO Sports Lighting's Illumination Summary, in the Appendix.
Musco Lighting uses LED fixtures with a high degree of optical control that can produce the required mitigation of spill light toward directions of the outfield light fixtures.

**Proposed Light fixtures and Poles are suggested as indicated below:**
**Poles and fixture for combination Baseball/Softball/Soccer/practice Field**
**Light Fixtures:**
The proposed sports light fixtures use 1,400 Watts and 12,000 Watts LED lamps and have aluminum housings with glare control, as illustrated in the manufacture product brochure included with this report. These fixtures have unique optical systems allowing precise beam control, to the point where it's a cost-effective option for recreational facilities.

**Poles:**
The poles in the recommended plan are to be 70 feet high. The selection of pole height was based on the need to provide adequate illumination at an economical cost, and to satisfactorily mitigate spill light toward residential properties adjacent to the fields. The configuration of the poles and light fixture clusters are illustrated in the MUSCO Sports Lighting product brochure attached as Appendix A.

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**Project Impacts Mitigation Measures**

The installation of the sport fields lights would produce spill light and glare to the west side of the fields. Mitigation measures shall therefore be imposed on the project to limit maximum spill light (measured in vertical and horizontal footcandles) to be equal to or less than 1.0 fc at property lines. Such computer predicted results can be field verified with a standard handheld illumination meter.

Glare shall be limited to a maximum of 9,000 – 10,000 candelas (cd) at 6 ft. height elevation at the property line. Field testing using a meter for measurement of glare is not generally practical due to the unavailability of trained technicians and instruments.

**Compliance Testing**

To ensure that the maximum trespass/spill light on residences at the identified remains at or below 1.0 fc, field testing is mandatory for the actual performance of the system.

Any need to re-aim and/or adjust the luminaires during the initial nighttime testing of the field lights shall be part of the project scope. This would ensure that no excessive trespass/spill light remains uncorrected.

**Controls**

The proposed field lights shall be provided with programmable controls to turn OFF the lights at a pre-set time, recommended by the school district. Manual controls shall only be provided for testing the lights.

Additional control features that can be considered are dimming controls that would allow operation of the field illumination to be reduced for practice play when there are no spectators present, as well as for after-game clean-up work. This has the benefit of allowing some degree of illumination after the prescribed time for when lights must be turned off immediately after a game.

End of Report

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# Los Altos School District Sport Fields

Mountain View,CA

## Lighting System

**Pole / Fixture Summary**

| Pole ID | Pole Height | Mtg Height | Fixture Qty | Luminaire Type | Load | Circuit |
|---|---|---|---|---|---|---|
| A1-A2 | 70' | 70' | 1 | TLC-LED-1200 | 1.17 kW | A |
| | | 70' | 1 | TLC-LED-1500 | 1.41 kW | A |
| | | 70' | 2 | TLC-LED-900 | 1.76 kW | A |
| | | 16' | 1 | TLC-BT-575 | 0.58 kW | A |
| B1 | 70' | 70' | 2 | TLC-LED-1500 | 2.82 kW | A |
| | | 70' | 4 | TLC-LED-900 | 3.52 kW | A |
| | | 16' | 1 | TLC-BT-575 | 0.58 kW | A |
| B2, D1 | 70' | 70' | 2 | TLC-LED-1500 | 2.82 kW | A |
| | | 70' | 3 | TLC-LED-900 | 2.64 kW | A |
| | | 16' | 1 | TLC-BT-575 | 0.58 kW | A |
| C1 | 70' | 70' | 1 | TLC-LED-1500 | 1.41 kW | A |
| | | 70' | 3 | TLC-LED-900 | 2.64 kW | A |
| | | 16' | 1 | TLC-BT-575 | 0.58 kW | A |
| C2, D2 | 70' | 70' | 1 | TLC-LED-1500 | 1.41 kW | A |
| | | 70' | 4 | TLC-LED-900 | 3.52 kW | A |
| | | 16' | 1 | TLC-BT-575 | 0.58 kW | A |
| *8* | | | *46* | | *44.45 kW* | |

**Circuit Summary**

| Circuit | Description | Load | Fixture Qty |
|---|---|---|---|
| A | Baseball | 44.45 kW | 46 |

**Fixture Type Summary**

| Type | Source | Wattage | Lumens | L90 | L80 | L70 | Quantity |
|---|---|---|---|---|---|---|---|
| TLC-LED-900 | LED 5700K - 75 CRI | 880W | 104,000 | >120,000 | >120,000 | >120,000 | 25 |
| TLC-LED-1500 | LED 5700K - 75 CRI | 1410W | 181,000 | >120,000 | >120,000 | >120,000 | 11 |
| TLC-LED-1200 | LED 5700K - 75 CRI | 1170W | 150,000 | >120,000 | >120,000 | >120,000 | 2 |
| TLC-BT-575 | LED 5700K - 75 CRI | 575W | 52,000 | >120,000 | >120,000 | >120,000 | 8 |

**Single Luminaire Amperage Draw Chart**

| Driver (.90 min power factor) | Max Line Amperage Per Luminaire | | | | | | |
|---|---|---|---|---|---|---|---|
| Single Phase Voltage | 208 (60) | 220 (60) | 240 (60) | 277 (60) | 347 (60) | 380 (60) | 480 (60) |
| TLC-LED-900 | 5.2 | 4.9 | 4.5 | 3.9 | 3.1 | 2.9 | 2.3 |
| TLC-LED-1500 | 8.4 | 7.9 | 7.3 | 6.3 | 5.0 | 4.6 | 3.6 |
| TLC-LED-1200 | 6.9 | 6.5 | 6.0 | 5.2 | 4.2 | 3.8 | 3.0 |
| TLC-BT-575 | 3.4 | 3.2 | 2.9 | 2.5 | 2.0 | 1.8 | 1.5 |

## Light Level Summary

**Calculation Grid Summary**

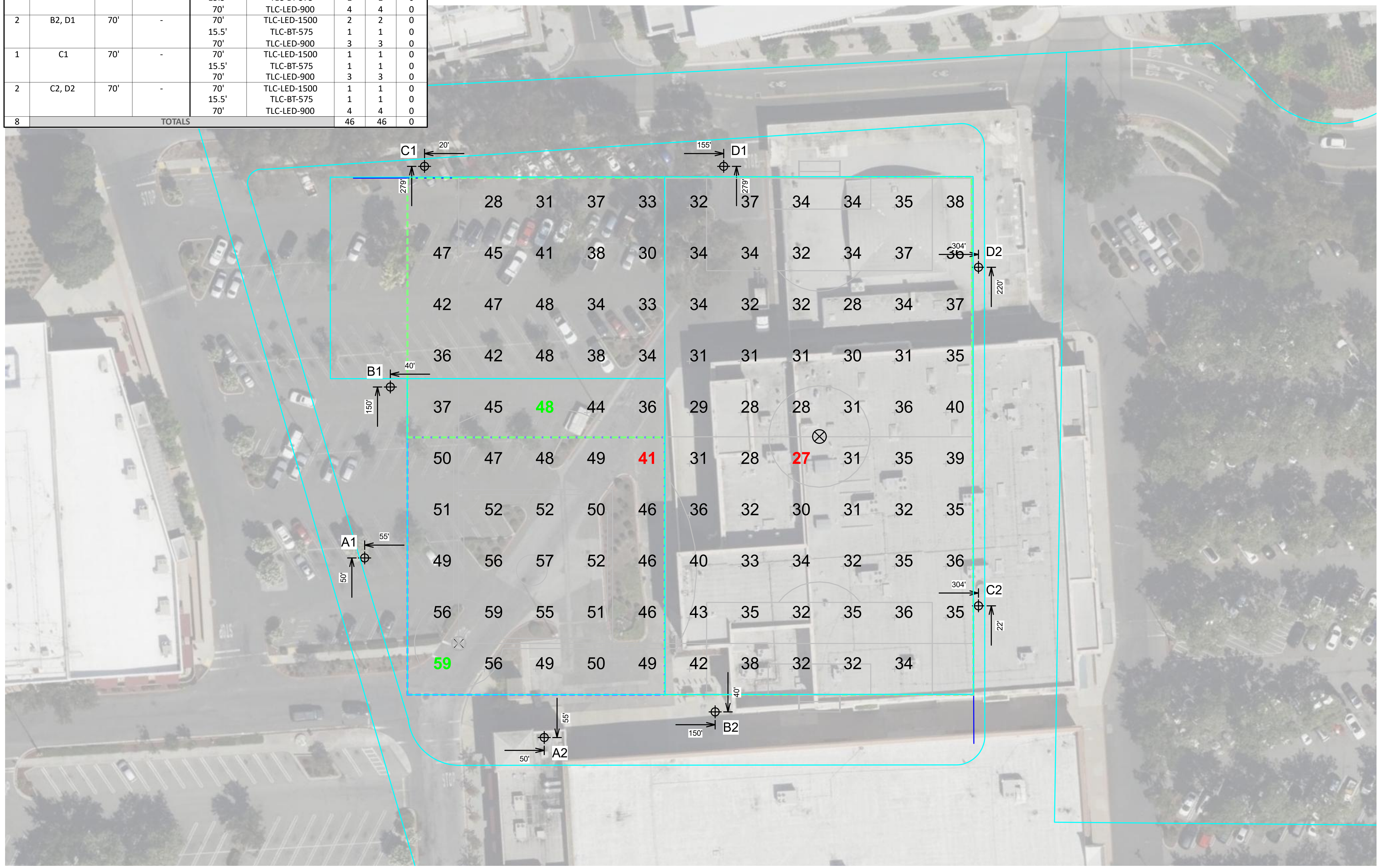
| Grid Name | Calculation Metric | Illumination | | | | | Circuits | Fixture Qty |
|---|---|---|---|---|---|---|---|---|
| | | Ave | Min | Max | Max/Min | Ave/Min | | |
| Baseball (Infield) | Horizontal Illuminance | 51 | 41 | 59 | 1.45 | 1.24 | A | 46 |
| Baseball (Outfield) | Horizontal Illuminance | 35.2 | 27 | 48 | 1.77 | 1.31 | A | 46 |
| Hyatt Spill (+80ft elevation) | Horizontal | 0 | 0 | 0 | 0.00 | | A | 46 |
| Hyatt Spill (+80ft elevation) | Max Candela (by Fixture) | 5016 | 4172 | 5766 | 1.38 | 1.20 | A | 46 |
| Hyatt Spill (+80ft elevation) | Max Vertical Illuminance Metric | 0.12 | 0.07 | 0.15 | 2.10 | 1.68 | A | 46 |
| Property Spill | Horizontal | 0.02 | 0 | 0.10 | 0.00 | | A | 46 |
| Property Spill | Max Candela (by Fixture) | 1927 | 0 | 9544 | 0.00 | | A | 46 |
| Property Spill | Max Vertical Illuminance Metric | 0.05 | 0 | 0.22 | 0.00 | | A | 46 |
| Soccer 1 | Horizontal Illuminance | 32.5 | 25 | 48 | 1.93 | 1.30 | A | 46 |
| Soccer 2 | Horizontal | 38 | 24 | 51 | 2.09 | 1.58 | A | 46 |

From Hometown to Professional

We Make It Happen.

## EQUIPMENT LIST FOR AREAS SHOWN

| Pole | | | | Luminaires | | | | |
|---|---|---|---|---|---|---|---|---|
| QTY | LOCATION | SIZE | GRADE ELEVATION | MOUNTING HEIGHT | LUMINAIRE TYPE | QTY / POLE | THIS GRID | OTHER GRIDS |
| 2 | A1-A2 | 70' | - | 70' | TLC-LED-1200 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 2 | 2 | 0 |
| 1 | B1 | 70' | - | 70' | TLC-LED-1500 | 2 | 2 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 4 | 4 | 0 |
| 2 | B2, D1 | 70' | - | 70' | TLC-LED-1500 | 2 | 2 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 3 | 3 | 0 |
| 1 | C1 | 70' | - | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 3 | 3 | 0 |
| 2 | C2, D2 | 70' | - | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 4 | 4 | 0 |
| 8 | TOTALS | | | | | 46 | 46 | 0 |




SCALE IN FEET 1 : 60

0' 60' 120'

Pole location(s) ⌖ dimensions are relative to 0,0 reference point(s) ⊗

**ENGINEERED DESIGN** By: Bryce Miles · File #225931A · 17-Apr-23

**Los Altos School District Sport Fields**
**Mountain View,CA**

## GRID SUMMARY

| | |
|---|---|
| **Name:** | **Baseball** |
| Size: | Irregular 272' / 386' / 301' |
| Spacing: | 30.0' x 30.0' |
| Height: | 3.0' above grade |

## ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

| | Infield | Outfield |
|---|---|---|
| **Guaranteed Average:** | **50** | **30** |
| Scan Average: | 51.04 | 35.24 |
| Maximum: | 59 | 48 |
| Minimum: | 41 | 27 |
| Avg / Min: | 1.25 | 1.29 |
| **Guaranteed Max / Min:** | **2** | **2.5** |
| Max / Min: | 1.45 | 1.77 |
| UG (adjacent pts): | 1.20 | 1.58 |
| CU: | 0.72 | |
| No. of Points: | 25 | 83 |

LUMINAIRE INFORMATION

| | |
|---|---|
| Applied Circuits: | A |
| **No. of Luminaires:** | **46** |
| Total Load: | 44.45 kW |

**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.

**We Make It Happen.**

## EQUIPMENT LIST FOR AREAS SHOWN

| Pole | | | | Luminaires | | | | |
|---|---|---|---|---|---|---|---|---|
| QTY | LOCATION | SIZE | GRADE ELEVATION | MOUNTING HEIGHT | LUMINAIRE TYPE | QTY / POLE | THIS GRID | OTHER GRIDS |
| 2 | A1-A2 | 70' | - | 70' | TLC-LED-1200 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 2 | 2 | 0 |
| 1 | B1 | 70' | - | 70' | TLC-LED-1500 | 2 | 2 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 4 | 4 | 0 |
| 2 | B2, D1 | 70' | - | 70' | TLC-LED-1500 | 2 | 2 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 3 | 3 | 0 |
| 1 | C1 | 70' | - | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 3 | 3 | 0 |
| 2 | C2, D2 | 70' | - | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 4 | 4 | 0 |
| 8 | TOTALS | | | | | 46 | 46 | 0 |


SCALE IN FEET 1 : 60

0' 60' 120'

Pole location(s) ⌖ dimensions are relative to 0,0 reference point(s) ⊗

**ENGINEERED DESIGN** By: Bryce Miles · File #225931A · 17-Apr-23

**Los Altos School District Sport Fields**
**Mountain View,CA**

### GRID SUMMARY

| | |
|---|---|
| Name: | Soccer 1 |
| Size: | 302' x 180' |
| Spacing: | 30.0' x 30.0' |
| Height: | 3.0' above grade |

### ILLUMINATION SUMMARY

| MAINTAINED HORIZONTAL FOOTCANDLES | |
|---|---|
| | Entire Grid |
| **Guaranteed Average:** | **30** |
| Scan Average: | 32.49 |
| Maximum: | 48 |
| Minimum: | 25 |
| Avg / Min: | 1.29 |
| **Guaranteed Max / Min:** | **2.5** |
| Max / Min: | 1.93 |
| UG (adjacent pts): | 1.53 |
| CU: | 0.43 |
| No. of Points: | 77 |
| LUMINAIRE INFORMATION | |
| Applied Circuits: | A |
| **No. of Luminaires:** | **46** |
| Total Load: | 44.45 kW |

**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.

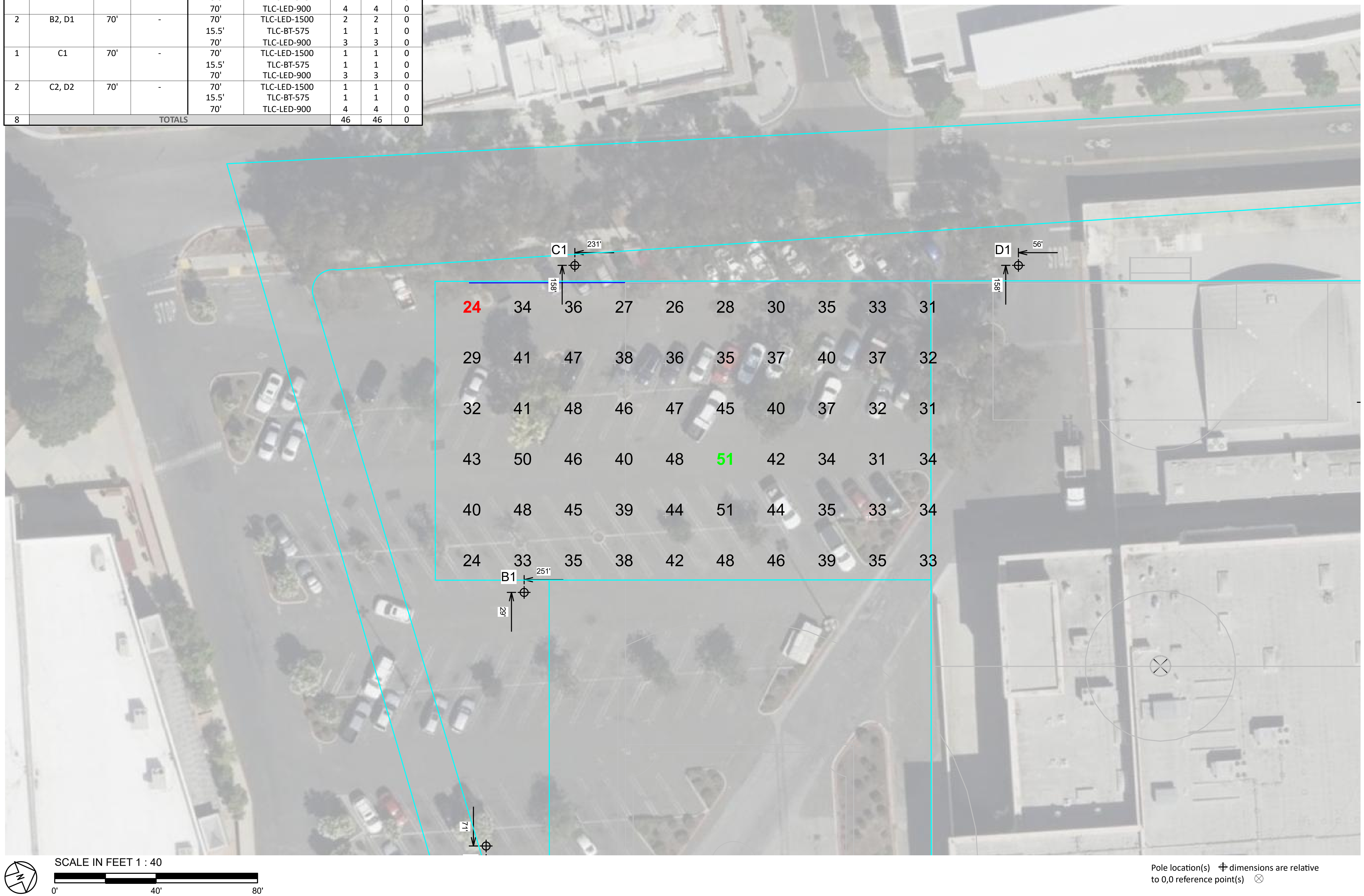
**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

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

**We Make It Happen.**

## EQUIPMENT LIST FOR AREAS SHOWN

| Pole | | | | Luminaires | | | | |
|---|---|---|---|---|---|---|---|---|
| QTY | LOCATION | SIZE | GRADE ELEVATION | MOUNTING HEIGHT | LUMINAIRE TYPE | QTY / POLE | THIS GRID | OTHER GRIDS |
| 2 | A1-A2 | 70' | - | 70' | TLC-LED-1200 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 2 | 2 | 0 |
| 1 | B1 | 70' | - | 70' | TLC-LED-1500 | 2 | 2 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 4 | 4 | 0 |
| 2 | B2, D1 | 70' | - | 70' | TLC-LED-1500 | 2 | 2 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 3 | 3 | 0 |
| 1 | C1 | 70' | - | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 3 | 3 | 0 |
| 2 | C2, D2 | 70' | - | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 4 | 4 | 0 |
| 8 | TOTALS | | | | | 46 | 46 | 0 |




Pole location(s) ⌖ dimensions are relative to 0,0 reference point(s) ⊗

**ENGINEERED DESIGN** By: Bryce Miles · File #225931A · 17-Apr-23

**Los Altos School District Sport Fields**
**Mountain View,CA**

## GRID SUMMARY

| | |
|---|---|
| Name: | Soccer 2 |
| Size: | 302' x 180' |
| Spacing: | 20.0' x 20.0' |
| Height: | 3.0' above grade |

## ILLUMINATION SUMMARY

| MAINTAINED HORIZONTAL FOOTCANDLES | |
|---|---|
| | Entire Grid |
| **Scan Average:** | **38.01** |
| Maximum: | 51 |
| Minimum: | 24 |
| Avg / Min: | 1.56 |
| **Max / Min:** | **2.09** |
| UG (adjacent pts): | 1.65 |
| CU: | 0.17 |
| No. of Points: | 60 |
| LUMINAIRE INFORMATION | |
| Applied Circuits: | A |
| **No. of Luminaires:** | **46** |
| Total Load: | 44.45 kW |

**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.

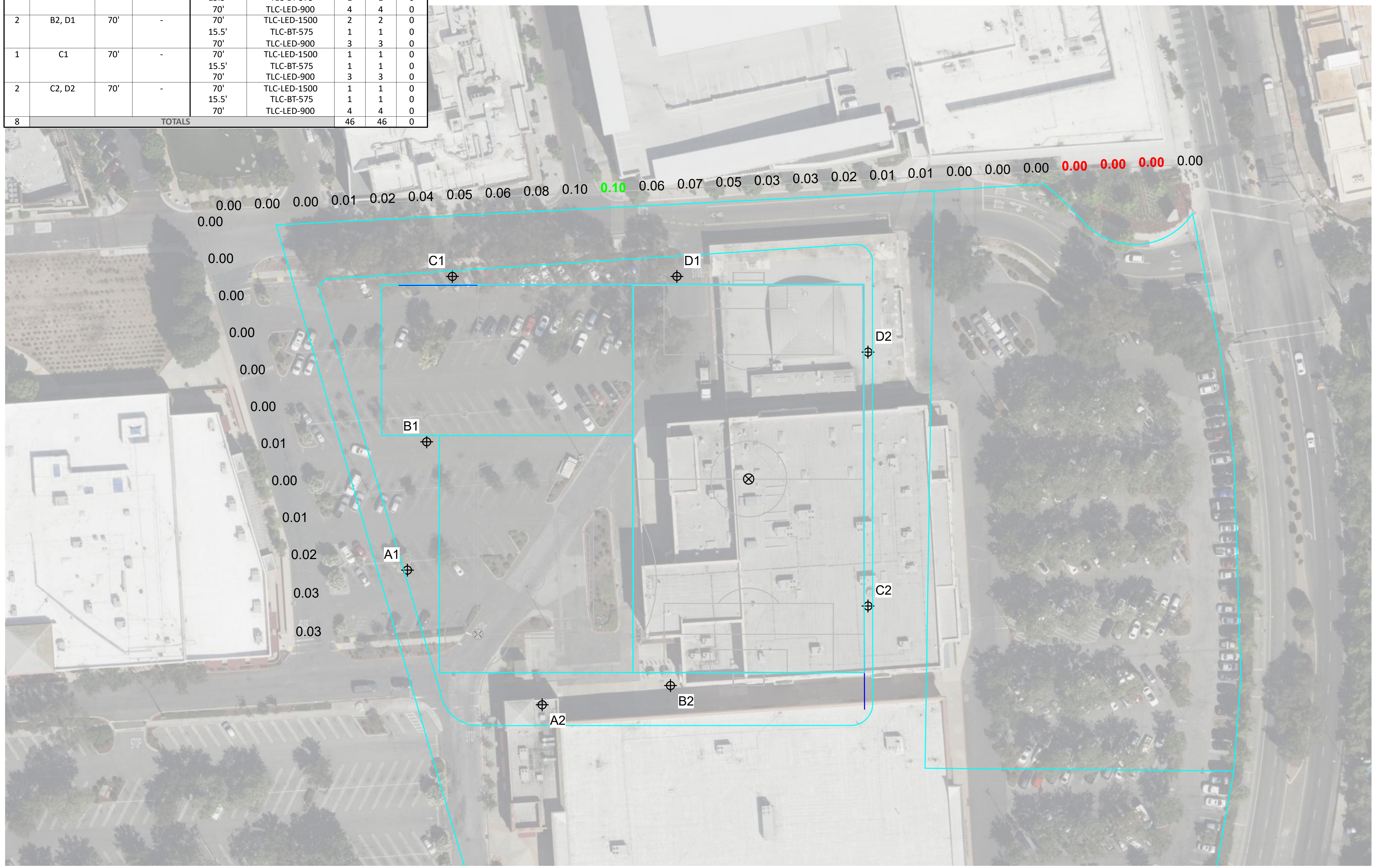
**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

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

We Make It Happen.

## EQUIPMENT LIST FOR AREAS SHOWN

| Pole | | | | Luminaires | | | | |
|---|---|---|---|---|---|---|---|---|
| QTY | LOCATION | SIZE | GRADE ELEVATION | MOUNTING HEIGHT | LUMINAIRE TYPE | QTY / POLE | THIS GRID | OTHER GRIDS |
| 2 | A1-A2 | 70' | - | 70' | TLC-LED-1200 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 2 | 2 | 0 |
| 1 | B1 | 70' | - | 70' | TLC-LED-1500 | 2 | 2 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 4 | 4 | 0 |
| 2 | B2, D1 | 70' | - | 70' | TLC-LED-1500 | 2 | 2 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 3 | 3 | 0 |
| 1 | C1 | 70' | - | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 3 | 3 | 0 |
| 2 | C2, D2 | 70' | - | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 4 | 4 | 0 |
| 8 | TOTALS | | | | | 46 | 46 | 0 |




SCALE IN FEET 1 : 80

0' 80' 160'

Pole location(s) ⌖ dimensions are relative to 0,0 reference point(s) ⊗

**ENGINEERED DESIGN** By: Bryce Miles · File #225931A · 17-Apr-23

**Los Altos School District Sport Fields**
**Mountain View,CA**

## GRID SUMMARY

| | |
|---|---|
| Name: | Property Spill |
| Spacing: | 30.0' |
| Height: | 3.0' above grade |

## ILLUMINATION SUMMARY

| HORIZONTAL FOOTCANDLES | |
|---|---|
| | Entire Grid |
| Scan Average: | 0.0223 |
| Maximum: | 0.10 |
| Minimum: | 0.00 |
| No. of Points: | 38 |
| LUMINAIRE INFORMATION | |
| Applied Circuits: | A |
| **No. of Luminaires:** | **46** |
| Total Load: | 44.45 kW |

**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.

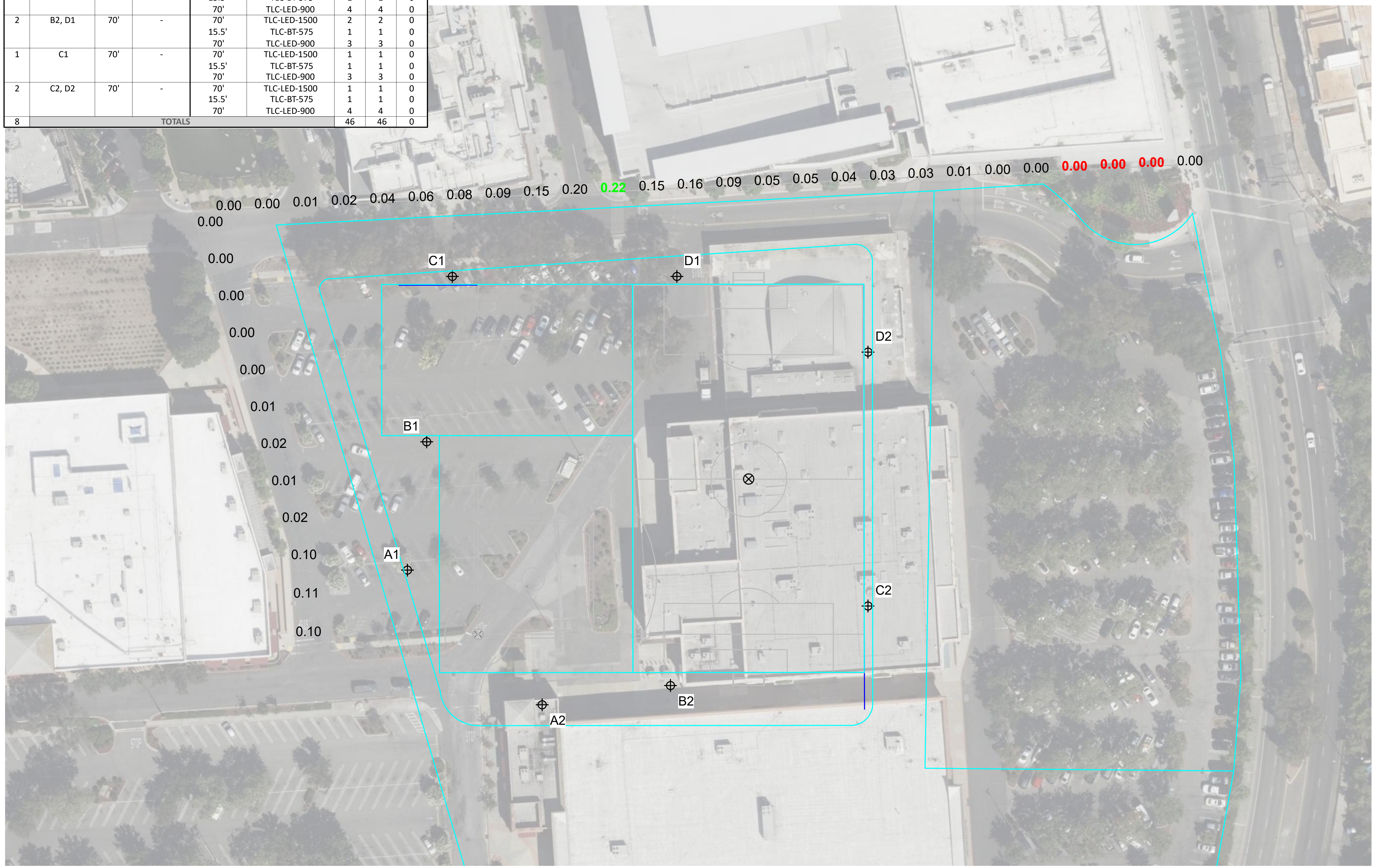
**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

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

**We Make It Happen.**

## EQUIPMENT LIST FOR AREAS SHOWN

| Pole | | | | Luminaires | | | | |
|---|---|---|---|---|---|---|---|---|
| QTY | LOCATION | SIZE | GRADE ELEVATION | MOUNTING HEIGHT | LUMINAIRE TYPE | QTY / POLE | THIS GRID | OTHER GRIDS |
| 2 | A1-A2 | 70' | - | 70' | TLC-LED-1200 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 2 | 2 | 0 |
| 1 | B1 | 70' | - | 70' | TLC-LED-1500 | 2 | 2 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 4 | 4 | 0 |
| 2 | B2, D1 | 70' | - | 70' | TLC-LED-1500 | 2 | 2 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 3 | 3 | 0 |
| 1 | C1 | 70' | - | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 3 | 3 | 0 |
| 2 | C2, D2 | 70' | - | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 4 | 4 | 0 |
| 8 | TOTALS | | | | | 46 | 46 | 0 |




SCALE IN FEET 1 : 80

0' 80' 160'

Pole location(s) ⌖ dimensions are relative to 0,0 reference point(s) ⊗

**ENGINEERED DESIGN** By: Bryce Miles · File #225931A · 17-Apr-23

**Los Altos School District Sport Fields**
**Mountain View,CA**

## GRID SUMMARY

| | |
|---|---|
| **Name:** | **Property Spill** |
| Spacing: | 30.0' |
| Height: | 3.0' above grade |

## ILLUMINATION SUMMARY

| | |
|---|---|
| MAX VERTICAL FOOTCANDLES | |
| | Entire Grid |
| Scan Average: | 0.0494 |
| Maximum: | 0.22 |
| Minimum: | 0.00 |
| No. of Points: | 38 |
| LUMINAIRE INFORMATION | |
| Applied Circuits: | A |
| **No. of Luminaires:** | **46** |
| Total Load: | 44.45 kW |

**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.

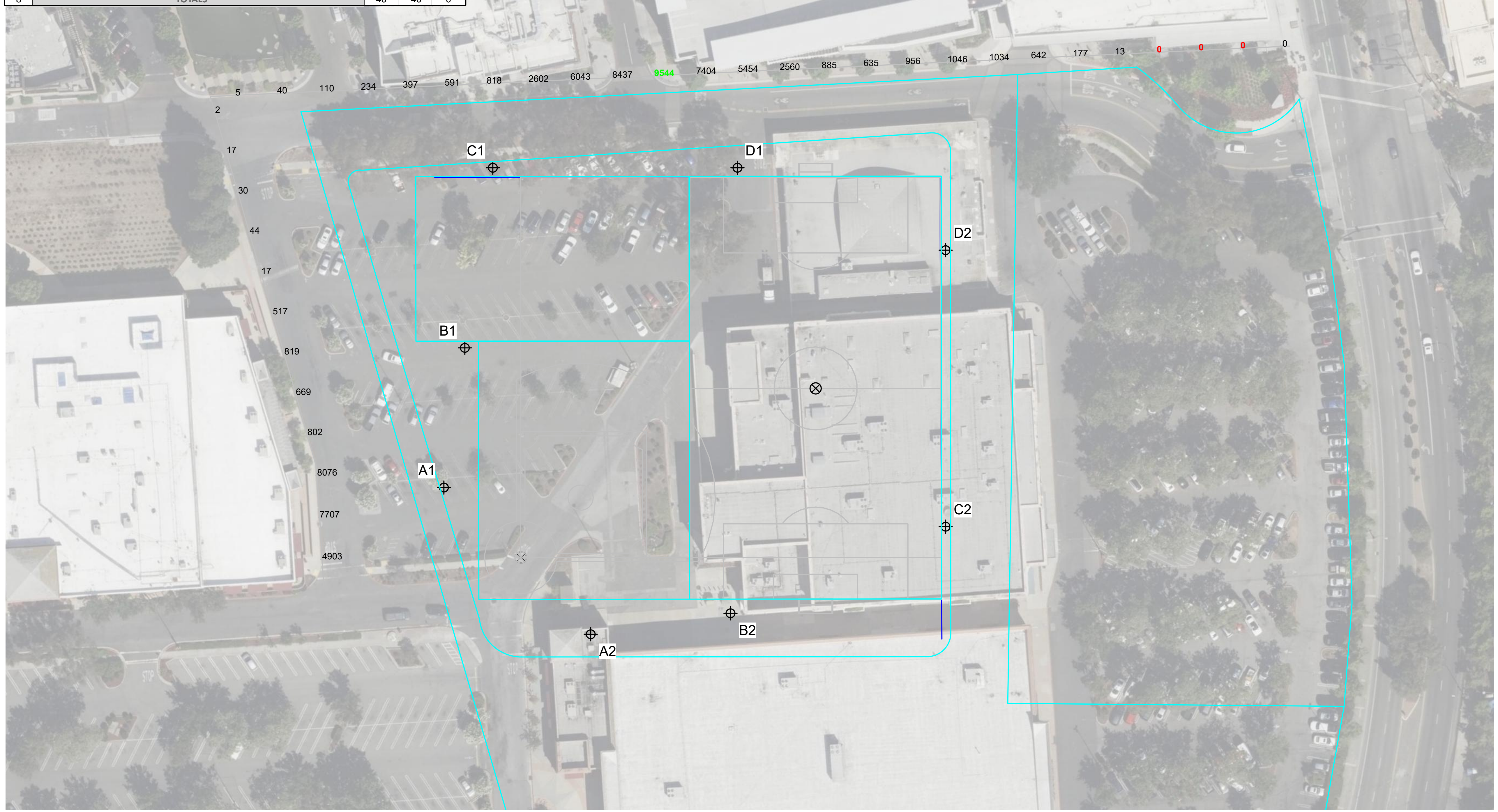
**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

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

**We Make It Happen.**

## EQUIPMENT LIST FOR AREAS SHOWN

| Pole | | | | Luminaires | | | | |
|---|---|---|---|---|---|---|---|---|
| QTY | LOCATION | SIZE | GRADE ELEVATION | MOUNTING HEIGHT | LUMINAIRE TYPE | QTY / POLE | THIS GRID | OTHER GRIDS |
| 2 | A1-A2 | 70' | - | 70' | TLC-LED-1200 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 2 | 2 | 0 |
| 1 | B1 | 70' | - | 70' | TLC-LED-1500 | 2 | 2 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 4 | 4 | 0 |
| 2 | B2, D1 | 70' | - | 70' | TLC-LED-1500 | 2 | 2 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 3 | 3 | 0 |
| 1 | C1 | 70' | - | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 3 | 3 | 0 |
| 2 | C2, D2 | 70' | - | 70' | TLC-LED-1500 | 1 | 1 | 0 |
| | | | | 15.5' | TLC-BT-575 | 1 | 1 | 0 |
| | | | | 70' | TLC-LED-900 | 4 | 4 | 0 |
| 8 | TOTALS | | | | | 46 | 46 | 0 |




SCALE IN FEET 1 : 80

0' 80' 160'

**ENGINEERED DESIGN** By: Bryce Miles · File #225931A · 17-Apr-23

Pole location(s) ⌖ dimensions are relative to 0,0 reference point(s) ⊗

**Los Altos School District Sport Fields**
**Mountain View,CA**

### GRID SUMMARY

| | |
|---|---|
| Name: | Property Spill |
| Spacing: | 30.0' |
| Height: | 3.0' above grade |

### ILLUMINATION SUMMARY

CANDELA (PER FIXTURE)

| | Entire Grid |
|---|---|
| Scan Average: | 1927.1040 |
| Maximum: | 9544.22 |
| Minimum: | 0.00 |
| No. of Points: | 38 |

LUMINAIRE INFORMATION

| | |
|---|---|
| Applied Circuits: | A |
| **No. of Luminaires:** | **46** |
| Total Load: | 44.45 kW |

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

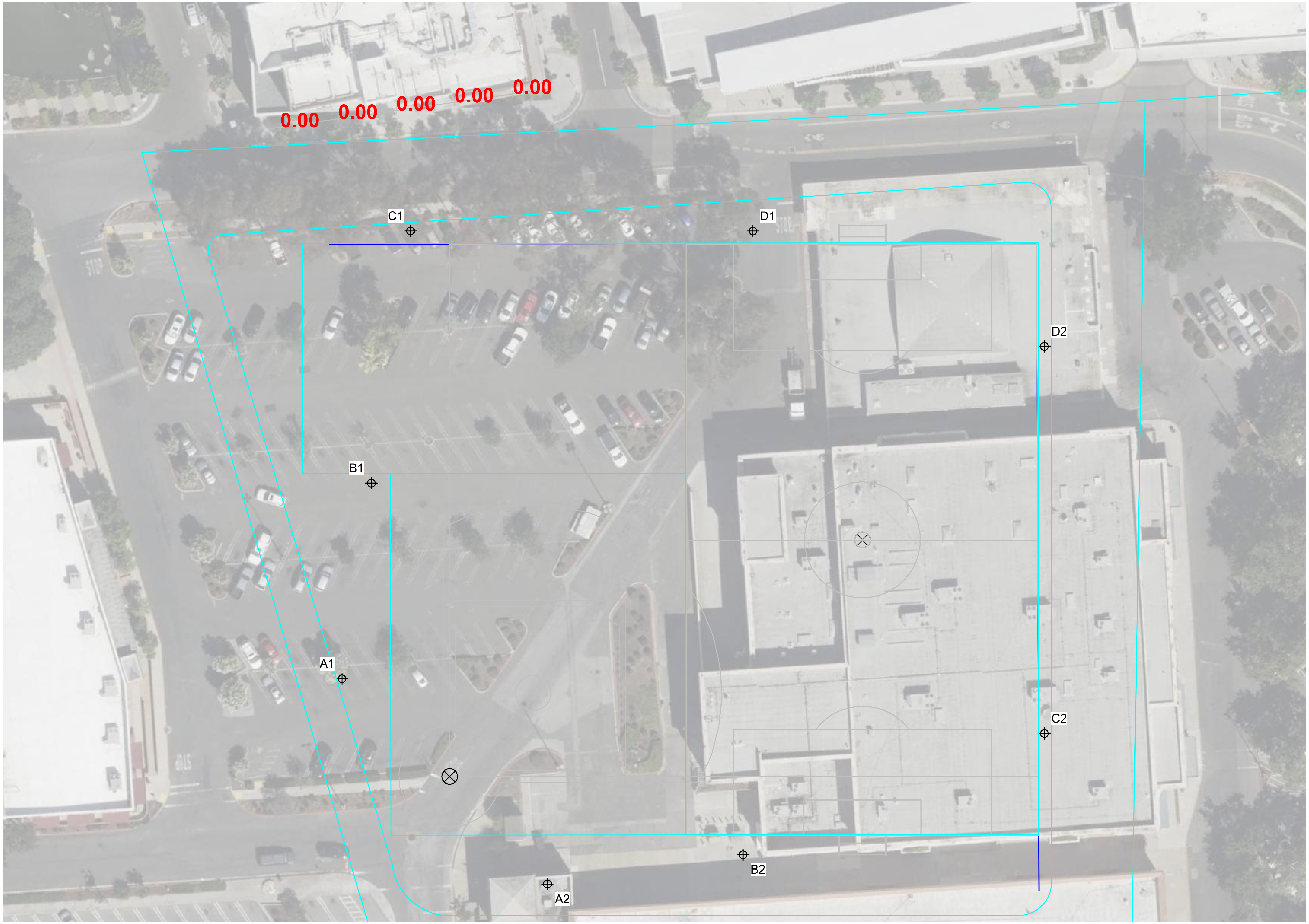
**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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

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

**We Make It Happen.**

**Los Altos School District Sport Fields**
**Mountain View,CA**




SCALE IN FEET 1 : 50

0' 50' 100'

Pole location(s) ⌖ dimensions are relative to 0,0 reference point(s) ⊗

**ENGINEERED DESIGN** By: Bryce Miles · File #225931A · 17-Apr-23

## GRID SUMMARY

| | |
|---|---|
| Name: | **Hyatt Spill (+80ft elevation)** |
| Spacing: | 30.0' |
| Height: | 80.0' above grade |

## ILLUMINATION SUMMARY

HORIZONTAL FOOTCANDLES

| | Entire Grid |
|---|---|
| Scan Average: | 0.0000 |
| Maximum: | 0.00 |
| Minimum: | 0.00 |
| No. of Points: | 5 |

LUMINAIRE INFORMATION

| | |
|---|---|
| Applied Circuits: | A |
| **No. of Luminaires:** | **46** |
| Total Load: | 44.45 kW |

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

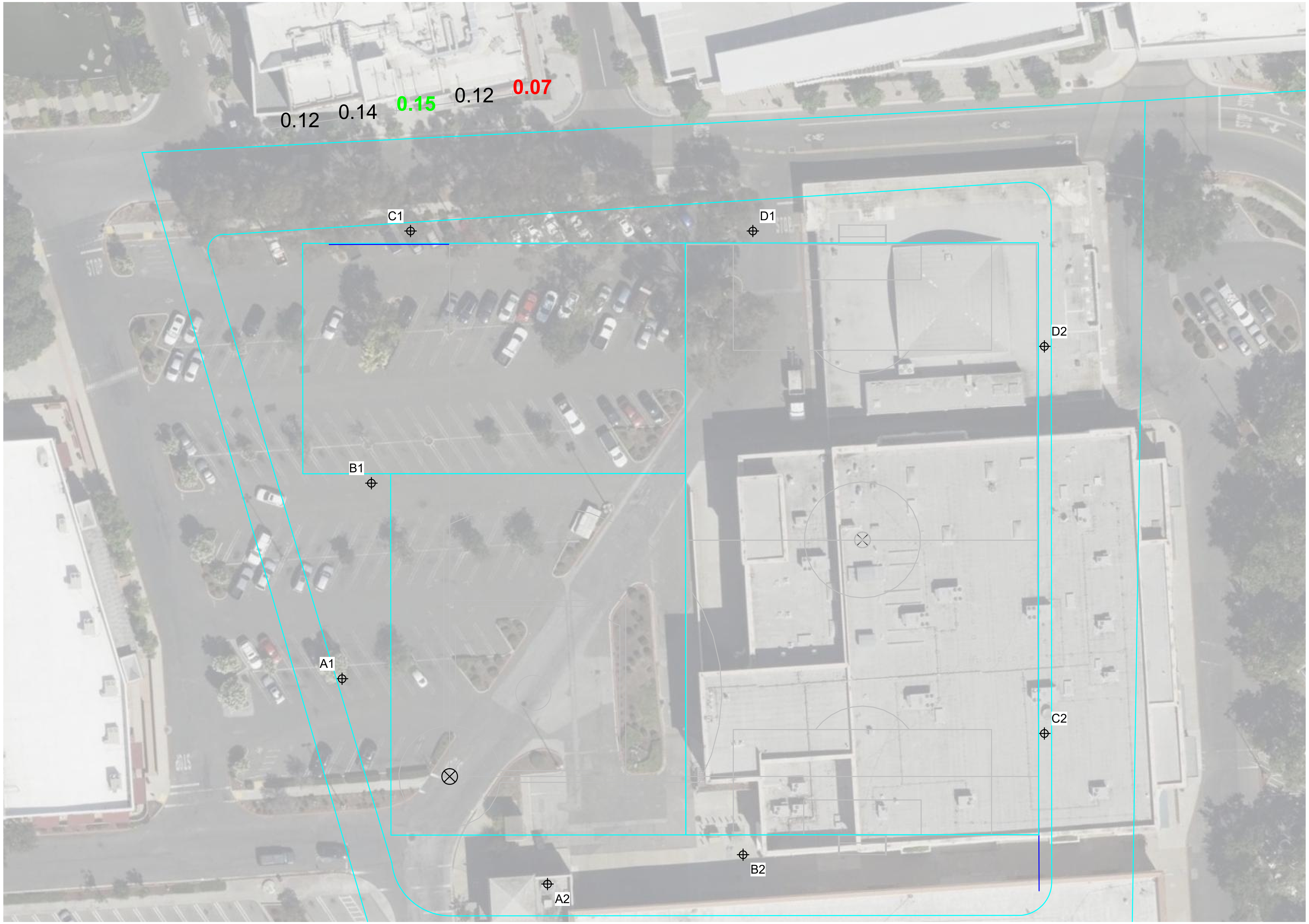
**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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

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

**We Make It Happen.**

**Los Altos School District Sport Fields**
**Mountain View,CA**




SCALE IN FEET 1 : 50
0' 50' 100'

Pole location(s) ⌖ dimensions are relative to 0,0 reference point(s) ⊗

**ENGINEERED DESIGN** By: Bryce Miles · File #225931A · 17-Apr-23

## GRID SUMMARY

| | |
|---|---|
| Name: | **Hyatt Spill (+80ft elevation)** |
| Spacing: | 30.0' |
| Height: | 80.0' above grade |

## ILLUMINATION SUMMARY

MAX VERTICAL FOOTCANDLES

| | Entire Grid |
|---|---|
| Scan Average: | 0.1178 |
| Maximum: | 0.15 |
| Minimum: | 0.07 |
| No. of Points: | 5 |

LUMINAIRE INFORMATION

| | |
|---|---|
| Applied Circuits: | A |
| **No. of Luminaires:** | **46** |
| Total Load: | 44.45 kW |

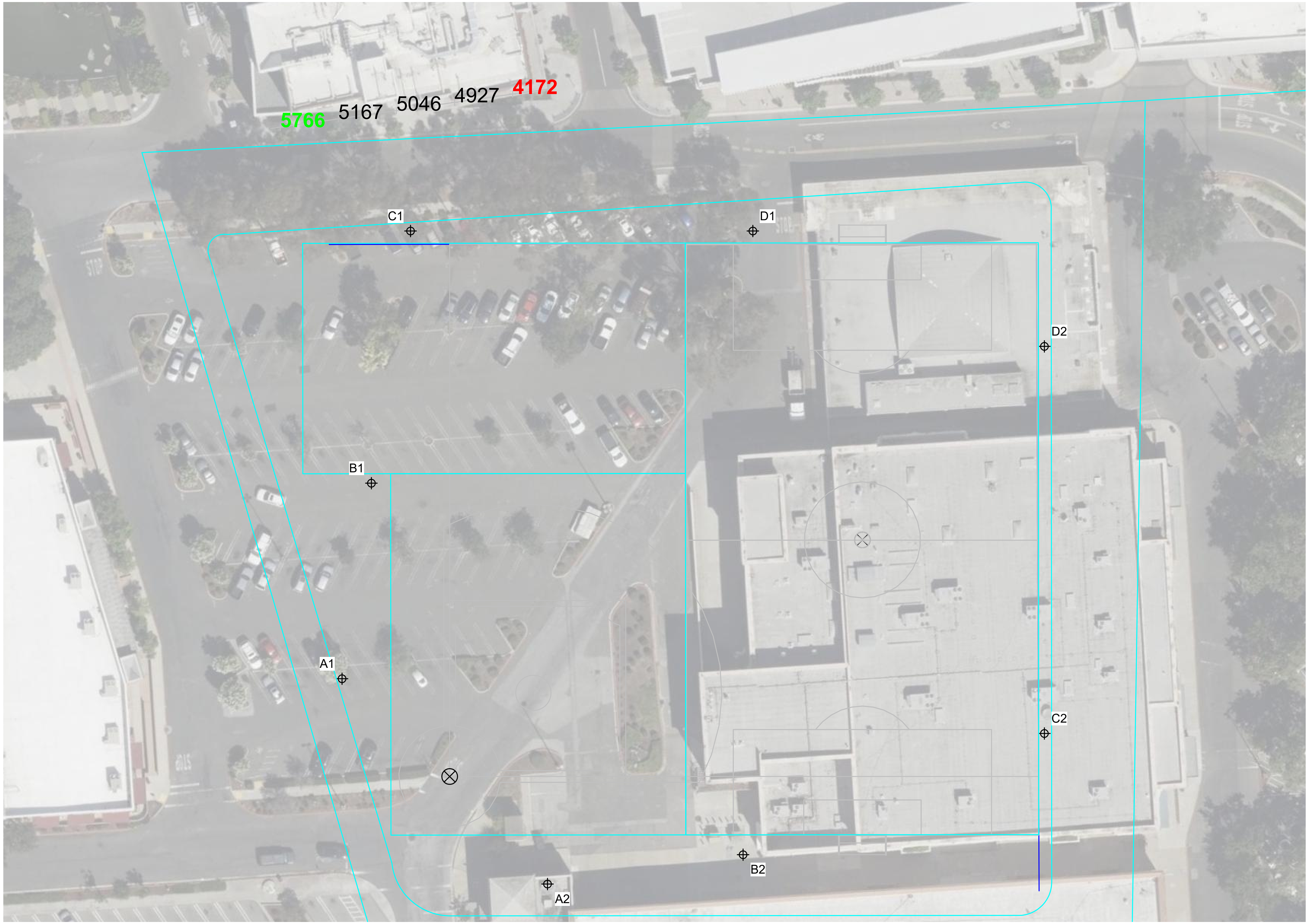
**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document.

**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 ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

**We Make It Happen.**




SCALE IN FEET 1 : 50

0' 50' 100'

Pole location(s) ⌖ dimensions are relative to 0,0 reference point(s) ⊗

**ENGINEERED DESIGN** By: Bryce Miles · File #225931A · 17-Apr-23

**Los Altos School District Sport Fields**
**Mountain View,CA**

## GRID SUMMARY

| | |
|---|---|
| **Name:** | **Hyatt Spill (+80ft elevation)** |
| Spacing: | 30.0' |
| Height: | 80.0' above grade |

## ILLUMINATION SUMMARY

| CANDELA (PER FIXTURE) | |
|---|---|
| | Entire Grid |
| Scan Average: | 5015.6382 |
| Maximum: | 5765.89 |
| Minimum: | 4171.64 |
| No. of Points: | 5 |
| LUMINAIRE INFORMATION | |
| Applied Circuits: | A |
| **No. of Luminaires:** | **46** |
| Total Load: | 44.45 kW |

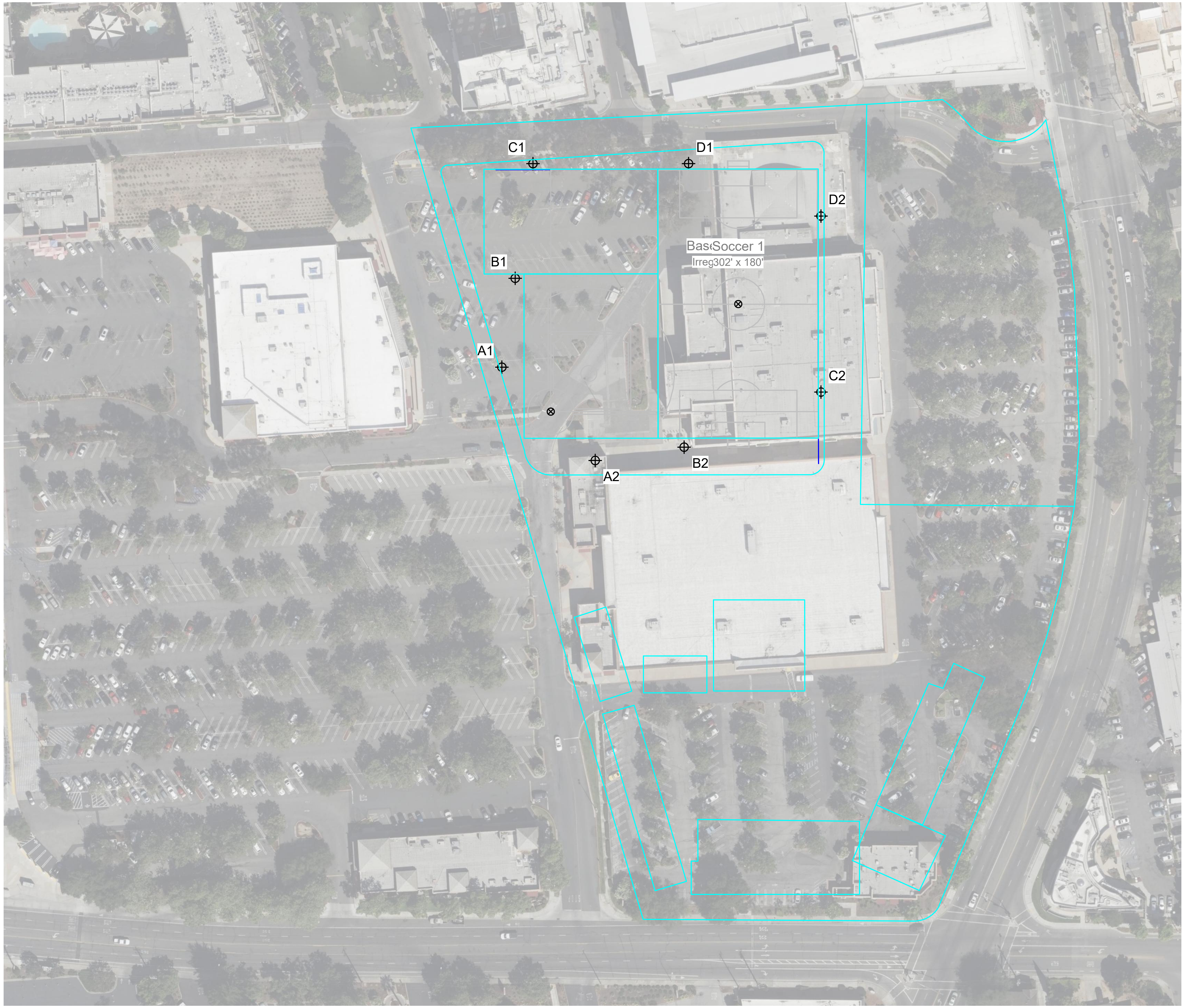
**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document.

**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 ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

We Make It Happen.




SCALE IN FEET 1 : 120

0' 120' 240'

**ENGINEERED DESIGN** By: Bryce Miles · File #225931A · 17-Apr-23

Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

**Los Altos School District Sport Fields**
**Mountain View,CA**

## EQUIPMENT LAYOUT

**INCLUDES:**
· Baseball
· Soccer 1

**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.

## EQUIPMENT LIST FOR AREAS SHOWN

| Pole | | | | Luminaires | | |
|---|---|---|---|---|---|---|
| QTY | LOCATION | SIZE | GRADE ELEVATION | MOUNTING HEIGHT | LUMINAIRE TYPE | QTY / POLE |
| 2 | A1-A2 | 70' | - | 70'<br>70'<br>15.5'<br>70' | TLC-LED-1200<br>TLC-LED-1500<br>TLC-BT-575<br>TLC-LED-900 | 1<br>1<br>1<br>2 |
| 1 | B1 | 70' | - | 70'<br>15.5'<br>70' | TLC-LED-1500<br>TLC-BT-575<br>TLC-LED-900 | 2<br>1<br>4 |
| 2 | B2, D1 | 70' | - | 70'<br>15.5'<br>70' | TLC-LED-1500<br>TLC-BT-575<br>TLC-LED-900 | 2<br>1<br>3 |
| 1 | C1 | 70' | - | 70'<br>15.5'<br>70' | TLC-LED-1500<br>TLC-BT-575<br>TLC-LED-900 | 1<br>1<br>3 |
| 2 | C2, D2 | 70' | - | 70'<br>15.5'<br>70' | TLC-LED-1500<br>TLC-BT-575<br>TLC-LED-900 | 1<br>1<br>4 |
| 8 | TOTALS | | | | | 46 |

## SINGLE LUMINAIRE AMPERAGE DRAW CHART

| Driver (.90 min power factor) | Line Amperage Per Luminaire (max draw) | | | | | | |
|---|---|---|---|---|---|---|---|
| Single Phase Voltage | 208 (60) | 220 (60) | 240 (60) | 277 (60) | 347 (60) | 380 (60) | 480 (60) |
| TLC-LED-900 | 5.2 | 4.9 | 4.5 | 3.9 | 3.1 | 2.9 | 2.3 |
| TLC-LED-1500 | 8.4 | 7.9 | 7.3 | 6.3 | 5.0 | 4.6 | 3.6 |
| TLC-LED-1200 | 6.9 | 6.5 | 6.0 | 5.2 | 4.2 | 3.8 | 3.0 |
| TLC-BT-575 | 3.4 | 3.2 | 2.9 | 2.5 | 2.0 | 1.8 | 1.5 |

We Make It Happen.

# APPENDIX D
# AIR QUALITY BACKGROUND DATA

# SRHS_Construction Custom Report

## Table of Contents

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | SRHS_Construction |
| Construction Start Date | 6/1/2024 |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 3.60 |
| Precipitation (days) | 5.60 |
| Location | 150 3rd St, San Rafael, CA 94901, USA |
| County | Marin |
| City | San Rafael |
| Air District | Bay Area AQMD |
| Air Basin | San Francisco Bay Area |
| TAZ | 919 |
| EDFZ | 2 |
| Electric Utility | Pacific Gas & Electric Company |
| Gas Utility | Pacific Gas & Electric |
| App Version | 2022.1.1.20 |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Recreational Swimming Pool | 10.0 | 1000sqft | 2.40 | 10,000 | 5,000 | 0.00 | — | New Aquatic Center |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| High School | 12.0 | 1000sqft | 0.90 | 12,000 | 14,000 | 14,000 | — | Arts Building and the Performing Arts Plaza |
| Golf Course | 4.60 | Acre | 4.60 | 0.00 | 0.00 | 0.00 | — | New artificial turf for the existing baseball and softball fields |

## 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

## 2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2024 | 0.33 | 0.56 | 2.38 | 3.63 | 0.01 | 0.09 | 0.60 | 0.70 | 0.09 | 0.24 | 0.33 | — | 816 | 816 | 0.05 | 0.04 | 0.89 | 830 |
| 2025 | 0.53 | 1.31 | 3.71 | 6.31 | 0.01 | 0.14 | 0.79 | 0.93 | 0.12 | 0.28 | 0.41 | — | 1,424 | 1,424 | 0.09 | 0.07 | 1.59 | 1,449 |
| 2026 | 0.21 | 0.75 | 1.46 | 2.75 | < 0.005 | 0.05 | 0.19 | 0.24 | 0.04 | 0.04 | 0.08 | — | 609 | 609 | 0.04 | 0.03 | 0.69 | 620 |
| 2028 | 0.31 | 0.18 | 2.19 | 2.96 | 0.01 | 0.05 | 0.36 | 0.41 | 0.05 | 0.08 | 0.13 | — | 1,149 | 1,149 | 0.10 | 0.13 | 1.60 | 1,191 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2024 | 0.33 | 0.56 | 2.40 | 3.58 | 0.01 | 0.09 | 0.60 | 0.70 | 0.09 | 0.24 | 0.33 | — | 809 | 809 | 0.05 | 0.04 | 0.02 | 823 |
| 2025 | 0.30 | 2.15 | 2.19 | 3.48 | 0.01 | 0.08 | 0.60 | 0.68 | 0.08 | 0.24 | 0.32 | — | 803 | 803 | 0.05 | 0.04 | 0.02 | 816 |
| 2026 | 0.21 | 0.75 | 1.48 | 2.70 | < 0.005 | 0.05 | 0.19 | 0.24 | 0.04 | 0.04 | 0.08 | — | 603 | 603 | 0.04 | 0.03 | 0.02 | 613 |
| 2028 | 0.31 | 0.18 | 2.25 | 2.93 | 0.01 | 0.05 | 0.36 | 0.41 | 0.05 | 0.08 | 0.13 | — | 1,144 | 1,144 | 0.10 | 0.13 | 0.04 | 1,185 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2024 | 0.14 | 0.23 | 1.00 | 1.49 | < 0.005 | 0.04 | 0.25 | 0.29 | 0.04 | 0.10 | 0.14 | — | 339 | 339 | 0.02 | 0.02 | 0.16 | 345 |
| 2025 | 0.26 | 0.61 | 1.82 | 3.00 | 0.01 | 0.07 | 0.40 | 0.47 | 0.06 | 0.15 | 0.21 | — | 684 | 684 | 0.04 | 0.04 | 0.33 | 696 |
| 2026 | 0.14 | 0.49 | 0.96 | 1.76 | < 0.005 | 0.03 | 0.12 | 0.15 | 0.03 | 0.03 | 0.05 | — | 394 | 394 | 0.02 | 0.02 | 0.19 | 401 |
| 2028 | 0.11 | 0.07 | 0.80 | 1.05 | < 0.005 | 0.02 | 0.13 | 0.15 | 0.02 | 0.03 | 0.05 | — | 411 | 411 | 0.04 | 0.05 | 0.25 | 426 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2024 | 0.03 | 0.04 | 0.18 | 0.27 | < 0.005 | 0.01 | 0.05 | 0.05 | 0.01 | 0.02 | 0.03 | — | 56.1 | 56.1 | < 0.005 | < 0.005 | 0.03 | 57.1 |
| 2025 | 0.05 | 0.11 | 0.33 | 0.55 | < 0.005 | 0.01 | 0.07 | 0.09 | 0.01 | 0.03 | 0.04 | — | 113 | 113 | 0.01 | 0.01 | 0.05 | 115 |
| 2026 | 0.03 | 0.09 | 0.18 | 0.32 | < 0.005 | 0.01 | 0.02 | 0.03 | 0.01 | < 0.005 | 0.01 | — | 65.3 | 65.3 | < 0.005 | < 0.005 | 0.03 | 66.4 |
| 2028 | 0.02 | 0.01 | 0.15 | 0.19 | < 0.005 | < 0.005 | 0.02 | 0.03 | < 0.005 | 0.01 | 0.01 | — | 68.0 | 68.0 | 0.01 | 0.01 | 0.04 | 70.5 |

# 3. Construction Emissions Details

## 3.1. Aquatics Center (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.25 | 0.21 | 2.03 | 2.96 | < 0.005 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 501 | 501 | 0.02 | < 0.005 | — | 503 |
| Dust From Material Movement | — | — | — | — | — | — | 0.38 | 0.38 | — | 0.19 | 0.19 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | 0.07 | 0.07 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.30 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.25 | 0.21 | 2.03 | 2.96 | < 0.005 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 501 | 501 | 0.02 | < 0.005 | — | 503 |
| Dust From Material Movement | — | — | — | — | — | — | 0.38 | 0.38 | — | 0.19 | 0.19 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | 0.07 | 0.07 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.30 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10 | 0.09 | 0.85 | 1.24 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 210 | 210 | 0.01 | < 0.005 | — | 210 |
| Dust From Material Movement | — | — | — | — | — | — | 0.16 | 0.16 | — | 0.08 | 0.08 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | 0.03 | 0.03 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.13 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.02 | 0.02 | 0.15 | 0.23 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 34.7 | 34.7 | < 0.005 | < 0.005 | — | 34.8 |
| Dust From Material Movement | — | — | — | — | — | — | 0.03 | 0.03 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.02 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.04 | 0.03 | 0.49 | 0.00 | 0.00 | 0.10 | 0.10 | 0.00 | 0.02 | 0.02 | — | 102 | 102 | < 0.005 | < 0.005 | 0.44 | 104 |
| Vendor | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 8.60 | 8.60 | < 0.005 | < 0.005 | 0.02 | 9.00 |
| Hauling | 0.03 | 0.01 | 0.31 | 0.17 | < 0.005 | < 0.005 | 0.05 | 0.05 | < 0.005 | 0.01 | 0.02 | — | 204 | 204 | 0.03 | 0.03 | 0.43 | 215 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.05 | 0.04 | 0.04 | 0.44 | 0.00 | 0.00 | 0.10 | 0.10 | 0.00 | 0.02 | 0.02 | — | 95.1 | 95.1 | < 0.005 | < 0.005 | 0.01 | 96.4 |
| Vendor | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 8.60 | 8.60 | < 0.005 | < 0.005 | < 0.005 | 8.98 |
| Hauling | 0.03 | 0.01 | 0.32 | 0.17 | < 0.005 | < 0.005 | 0.05 | 0.05 | < 0.005 | 0.01 | 0.02 | — | 204 | 204 | 0.03 | 0.03 | 0.01 | 215 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.02 | 0.18 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.01 | 0.01 | — | 40.0 | 40.0 | < 0.005 | < 0.005 | 0.08 | 40.6 |
| Vendor | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 3.60 | 3.60 | < 0.005 | < 0.005 | < 0.005 | 3.77 |
| Hauling | 0.01 | < 0.005 | 0.13 | 0.07 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | 0.01 | 0.01 | — | 85.6 | 85.6 | 0.01 | 0.01 | 0.08 | 90.1 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 6.62 | 6.62 | < 0.005 | < 0.005 | 0.01 | 6.72 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.60 | 0.60 | < 0.005 | < 0.005 | < 0.005 | 0.62 |
| Hauling | < 0.005 | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 14.2 | 14.2 | < 0.005 | < 0.005 | 0.01 | 14.9 |

## 3.3. Aquatics Center (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 0.19 | 1.83 | 2.90 | < 0.005 | 0.08 | — | 0.08 | 0.07 | — | 0.07 | — | 501 | 501 | 0.02 | < 0.005 | — | 503 |
| Dust From Material Movement | — | — | — | — | — | — | 0.38 | 0.38 | — | 0.19 | 0.19 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | 0.07 | 0.07 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.30 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 0.19 | 1.83 | 2.90 | < 0.005 | 0.08 | — | 0.08 | 0.07 | — | 0.07 | — | 501 | 501 | 0.02 | < 0.005 | — | 503 |
| Dust From Material Movement | — | — | — | — | — | — | 0.38 | 0.38 | — | 0.19 | 0.19 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Demolitio | — | — | — | — | — | — | 0.07 | 0.07 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.30 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.12 | 0.10 | 0.98 | 1.55 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 268 | 268 | 0.01 | < 0.005 | — | 269 |
| Dust From Material Movement | — | — | — | — | — | — | 0.20 | 0.20 | — | 0.10 | 0.10 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | 0.04 | 0.04 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.16 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.02 | 0.18 | 0.28 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 44.3 | 44.3 | < 0.005 | < 0.005 | — | 44.5 |
| Dust From Material Movement | — | — | — | — | — | — | 0.04 | 0.04 | — | 0.02 | 0.02 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.03 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.04 | 0.03 | 0.45 | 0.00 | 0.00 | 0.10 | 0.10 | 0.00 | 0.02 | 0.02 | — | 100 | 100 | < 0.005 | < 0.005 | 0.41 | 102 |
| Vendor | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 8.44 | 8.44 | < 0.005 | < 0.005 | 0.02 | 8.83 |
| Hauling | 0.03 | 0.01 | 0.29 | 0.17 | < 0.005 | < 0.005 | 0.05 | 0.05 | < 0.005 | 0.01 | 0.02 | — | 200 | 200 | 0.03 | 0.03 | 0.42 | 211 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.04 | 0.04 | 0.41 | 0.00 | 0.00 | 0.10 | 0.10 | 0.00 | 0.02 | 0.02 | — | 93.3 | 93.3 | < 0.005 | < 0.005 | 0.01 | 94.5 |
| Vendor | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 8.44 | 8.44 | < 0.005 | < 0.005 | < 0.005 | 8.81 |
| Hauling | 0.03 | 0.01 | 0.31 | 0.17 | < 0.005 | < 0.005 | 0.05 | 0.05 | < 0.005 | 0.01 | 0.02 | — | 200 | 200 | 0.03 | 0.03 | 0.01 | 210 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.02 | 0.21 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.01 | 0.01 | — | 50.0 | 50.0 | < 0.005 | < 0.005 | 0.09 | 50.8 |
| Vendor | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 4.51 | 4.51 | < 0.005 | < 0.005 | < 0.005 | 4.71 |
| Hauling | 0.02 | < 0.005 | 0.16 | 0.09 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | — | 107 | 107 | 0.01 | 0.02 | 0.10 | 113 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.04 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 8.28 | 8.28 | < 0.005 | < 0.005 | 0.02 | 8.41 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.75 | 0.75 | < 0.005 | < 0.005 | < 0.005 | 0.78 |
| Hauling | < 0.005 | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 17.7 | 17.7 | < 0.005 | < 0.005 | 0.02 | 18.6 |

## 3.5. Arts Building and Performing Arts Plaza (2025) - Unmitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.16 | 0.13 | 1.28 | 2.20 | < 0.005 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | — | 353 | 353 | 0.01 | < 0.005 | — | 354 |
| Dust From Material Movement | — | — | — | — | — | — | 0.03 | 0.03 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | 0.02 | 0.02 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.59 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.16 | 0.13 | 1.28 | 2.20 | < 0.005 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | — | 353 | 353 | 0.01 | < 0.005 | — | 354 |
| Dust From Material Movement | — | — | — | — | — | — | 0.03 | 0.03 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | 0.02 | 0.02 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.59 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07 | 0.06 | 0.53 | 0.92 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 148 | 148 | 0.01 | < 0.005 | — | 148 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.25 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.10 | 0.17 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 24.4 | 24.4 | < 0.005 | < 0.005 | — | 24.5 |
| Dust From Material Movement | — | — | — | — | — | — | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.04 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.04 | 0.03 | 0.44 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.02 | 0.02 | — | 97.4 | 97.4 | < 0.005 | < 0.005 | 0.39 | 99.0 |
| Vendor | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 8.44 | 8.44 | < 0.005 | < 0.005 | 0.02 | 8.83 |
| Hauling | 0.02 | < 0.005 | 0.23 | 0.13 | < 0.005 | < 0.005 | 0.04 | 0.04 | < 0.005 | 0.01 | 0.01 | — | 156 | 156 | 0.02 | 0.02 | 0.33 | 164 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.04 | 0.04 | 0.04 | 0.40 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.02 | 0.02 | — | 90.9 | 90.9 | < 0.005 | < 0.005 | 0.01 | 92.1 |
| Vendor | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 8.44 | 8.44 | < 0.005 | < 0.005 | < 0.005 | 8.81 |
| Hauling | 0.02 | < 0.005 | 0.24 | 0.13 | < 0.005 | < 0.005 | 0.04 | 0.04 | < 0.005 | 0.01 | 0.01 | — | 156 | 156 | 0.02 | 0.02 | 0.01 | 164 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.01 | 0.16 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.01 | 0.01 | — | 38.2 | 38.2 | < 0.005 | < 0.005 | 0.07 | 38.8 |
| Vendor | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 3.54 | 3.54 | < 0.005 | < 0.005 | < 0.005 | 3.69 |
| Hauling | 0.01 | < 0.005 | 0.10 | 0.06 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | 0.01 | — | 65.2 | 65.2 | 0.01 | 0.01 | 0.06 | 68.6 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 6.33 | 6.33 | < 0.005 | < 0.005 | 0.01 | 6.42 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.59 | 0.59 | < 0.005 | < 0.005 | < 0.005 | 0.61 |
| Hauling | < 0.005 | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 10.8 | 10.8 | < 0.005 | < 0.005 | 0.01 | 11.4 |

## 3.7. Arts Building and Performing Arts Plaza (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.15 | 0.12 | 1.21 | 2.20 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 353 | 353 | 0.01 | < 0.005 | — | 354 |
| Dust From Material Movement | — | — | — | — | — | — | 0.03 | 0.03 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | 0.02 | 0.02 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.59 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.15 | 0.12 | 1.21 | 2.20 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 353 | 353 | 0.01 | < 0.005 | — | 354 |
| Dust From Material Movement | — | — | — | — | — | — | 0.03 | 0.03 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | 0.02 | 0.02 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.59 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10 | 0.08 | 0.79 | 1.44 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 230 | 230 | 0.01 | < 0.005 | — | 231 |
| Dust From Material Movement | — | — | — | — | — | — | 0.02 | 0.02 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | 0.02 | 0.02 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.38 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.02 | 0.01 | 0.14 | 0.26 | < 0.005 | 0.01 | — | 0.01 | < 0.005 | — | < 0.005 | — | 38.2 | 38.2 | < 0.005 | < 0.005 | — | 38.3 |
| Dust From Material Movement | — | — | — | — | — | — | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | — | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.07 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.04 | 0.02 | 0.41 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.02 | 0.02 | — | 95.6 | 95.6 | < 0.005 | < 0.005 | 0.36 | 97.1 |
| Vendor | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 8.29 | 8.29 | < 0.005 | < 0.005 | 0.02 | 8.67 |
| Hauling | 0.02 | < 0.005 | 0.22 | 0.13 | < 0.005 | < 0.005 | 0.04 | 0.04 | < 0.005 | 0.01 | 0.01 | — | 153 | 153 | 0.02 | 0.02 | 0.31 | 161 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.03 | 0.03 | 0.37 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.02 | 0.02 | — | 89.2 | 89.2 | < 0.005 | < 0.005 | 0.01 | 90.4 |
| Vendor | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 8.29 | 8.29 | < 0.005 | < 0.005 | < 0.005 | 8.65 |
| Hauling | 0.02 | < 0.005 | 0.23 | 0.13 | < 0.005 | < 0.005 | 0.04 | 0.04 | < 0.005 | 0.01 | 0.01 | — | 153 | 153 | 0.02 | 0.02 | 0.01 | 160 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.02 | 0.23 | 0.00 | 0.00 | 0.06 | 0.06 | 0.00 | 0.01 | 0.01 | — | 58.5 | 58.5 | < 0.005 | < 0.005 | 0.10 | 59.4 |
| Vendor | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 5.42 | 5.42 | < 0.005 | < 0.005 | 0.01 | 5.66 |
| Hauling | 0.02 | < 0.005 | 0.15 | 0.09 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | — | 99.7 | 99.7 | 0.01 | 0.02 | 0.09 | 105 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.04 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 9.69 | 9.69 | < 0.005 | < 0.005 | 0.02 | 9.84 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.90 | 0.90 | < 0.005 | < 0.005 | < 0.005 | 0.94 |
| Hauling | < 0.005 | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 16.5 | 16.5 | < 0.005 | < 0.005 | 0.01 | 17.4 |

## 3.9. Athletics Fields Turf (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.17 | 0.14 | 1.15 | 2.01 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 317 | 317 | 0.01 | < 0.005 | — | 319 |
| Dust From Material Movement | — | — | — | — | — | — | 0.07 | 0.07 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.17 | 0.14 | 1.15 | 2.01 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 317 | 317 | 0.01 | < 0.005 | — | 319 |
| Dust From Material Movement | — | — | — | — | — | — | 0.07 | 0.07 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.06 | 0.05 | 0.41 | 0.72 | < 0.005 | 0.02 | — | 0.02 | 0.01 | — | 0.01 | — | 114 | 114 | < 0.005 | < 0.005 | — | 114 |
| Dust From Material Movement | — | — | — | — | — | — | 0.03 | 0.03 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.08 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 18.9 | 18.9 | < 0.005 | < 0.005 | — | 18.9 |
| Dust From Material Movement | — | — | — | — | — | — | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03 | 0.03 | 0.02 | 0.30 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.02 | 0.02 | — | 77.5 | 77.5 | < 0.005 | < 0.005 | 0.25 | 78.0 |
| Vendor | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 7.90 | 7.90 | < 0.005 | < 0.005 | 0.02 | 8.26 |
| Hauling | 0.11 | 0.02 | 1.02 | 0.64 | 0.01 | 0.01 | 0.20 | 0.21 | 0.01 | 0.05 | 0.06 | — | 746 | 746 | 0.09 | 0.12 | 1.33 | 786 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03 | 0.03 | 0.02 | 0.27 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.02 | 0.02 | — | 72.3 | 72.3 | < 0.005 | < 0.005 | 0.01 | 73.3 |
| Vendor | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 7.90 | 7.90 | < 0.005 | < 0.005 | < 0.005 | 8.25 |
| Hauling | 0.11 | 0.02 | 1.07 | 0.64 | 0.01 | 0.01 | 0.20 | 0.21 | 0.01 | 0.05 | 0.06 | — | 746 | 746 | 0.09 | 0.12 | 0.03 | 785 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.09 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | — | 26.1 | 26.1 | < 0.005 | < 0.005 | 0.04 | 26.4 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 2.84 | 2.84 | < 0.005 | < 0.005 | < 0.005 | 2.96 |
| Hauling | 0.04 | 0.01 | 0.38 | 0.23 | < 0.005 | < 0.005 | 0.07 | 0.08 | < 0.005 | 0.02 | 0.02 | — | 268 | 268 | 0.03 | 0.04 | 0.21 | 282 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 4.31 | 4.31 | < 0.005 | < 0.005 | 0.01 | 4.38 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.47 | 0.47 | < 0.005 | < 0.005 | < 0.005 | 0.49 |
| Hauling | 0.01 | < 0.005 | 0.07 | 0.04 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 44.3 | 44.3 | 0.01 | 0.01 | 0.03 | 46.7 |

## 3.11. Paving (2025) - Unmitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Paving | — | 1.39 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Paving | — | < 0.005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Paving | — | < 0.005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

# 5. Activity Data

## 5.1. Construction Schedule

| Phase Name | Phase Type | Start Date | End Date | Days Per Week | Work Days per Phase | Phase Description |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| Aquatics Center | Grading | 6/1/2024 | 9/30/2025 | 5.00 | 347 | Aquatics Center |
| Arts Building and Performing Arts Plaza | Grading | 6/1/2025 | 11/30/2026 | 5.00 | 391 | AR building and PA Plaza |
| Athletics Fields Turf | Grading | 6/1/2028 | 11/30/2028 | 5.00 | 131 | Athletics Fields Turf |
| Paving | Paving | 12/1/2025 | 12/1/2025 | 5.00 | 1.00 | Used to generate VOC emissions from paving |

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Aquatics Center | Graders | Diesel | Average | 0.00 | 1.00 | 148 | 0.41 |
| Aquatics Center | Rubber Tired Dozers | Diesel | Average | 1.00 | 0.46 | 367 | 0.40 |
| Aquatics Center | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 1.59 | 84.0 | 0.37 |
| Aquatics Center | Aerial Lifts | Electric | Average | 1.00 | 0.40 | 46.0 | 0.31 |
| Aquatics Center | Bore/Drill Rigs | Diesel | Average | 1.00 | 0.29 | 83.0 | 0.50 |
| Aquatics Center | Cement and Mortar Mixers | Diesel | Average | 1.00 | 0.06 | 10.0 | 0.56 |
| Aquatics Center | Cranes | Diesel | Average | 1.00 | 0.22 | 367 | 0.29 |
| Aquatics Center | Excavators | Diesel | Average | 1.00 | 1.84 | 158 | 0.38 |
| Aquatics Center | Paving Equipment | Diesel | Average | 1.00 | 0.07 | 89.0 | 0.36 |
| Aquatics Center | Plate Compactors | Diesel | Average | 1.00 | 0.21 | 8.00 | 0.43 |
| Aquatics Center | Rough Terrain Forklifts | Diesel | Average | 1.00 | 1.73 | 100 | 0.40 |
| Aquatics Center | Skid Steer Loaders | Diesel | Average | 1.00 | 3.29 | 71.0 | 0.37 |
| Aquatics Center | Welders | Diesel | Average | 1.00 | 0.35 | 46.0 | 0.45 |
| Arts Building and Performing Arts Plaza | Graders | Diesel | Average | 0.00 | 8.00 | 148 | 0.41 |
| Arts Building and Performing Arts Plaza | Rubber Tired Dozers | Diesel | Average | 0.00 | 8.00 | 367 | 0.40 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Arts Building and Performing Arts Plaza | Tractors/Loaders/Backh | Diesel | Average | 1.00 | 1.43 | 84.0 | 0.37 |
| Arts Building and Performing Arts Plaza | Aerial Lifts | Electric | Average | 1.00 | 2.01 | 46.0 | 0.31 |
| Arts Building and Performing Arts Plaza | Air Compressors | Electric | Average | 1.00 | 0.61 | 37.0 | 0.48 |
| Arts Building and Performing Arts Plaza | Bore/Drill Rigs | Diesel | Average | 1.00 | 0.26 | 83.0 | 0.50 |
| Arts Building and Performing Arts Plaza | Crawler Tractors | Diesel | Average | 1.00 | 0.43 | 87.0 | 0.43 |
| Arts Building and Performing Arts Plaza | Excavators | Diesel | Average | 1.00 | 1.38 | 158 | 0.38 |
| Arts Building and Performing Arts Plaza | Plate Compactors | Diesel | Average | 1.00 | 0.77 | 8.00 | 0.43 |
| Arts Building and Performing Arts Plaza | Pumps | Diesel | Average | 1.00 | 0.41 | 11.0 | 0.74 |
| Arts Building and Performing Arts Plaza | Rollers | Diesel | Average | 1.00 | 0.72 | 36.0 | 0.38 |
| Arts Building and Performing Arts Plaza | Rough Terrain Forklifts | Diesel | Average | 1.00 | 1.43 | 96.0 | 0.40 |
| Arts Building and Performing Arts Plaza | Skid Steer Loaders | Diesel | Average | 1.00 | 2.51 | 71.0 | 0.37 |
| Arts Building and Performing Arts Plaza | Welders | Diesel | Average | 1.00 | 0.46 | 46.0 | 0.45 |
| Athletics Fields Turf | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 2.52 | 84.0 | 0.37 |
| Athletics Fields Turf | Graders | Diesel | Average | 1.00 | 0.92 | 148 | 0.41 |
| Athletics Fields Turf | Rubber Tired Dozers | Diesel | Average | 0.00 | 8.00 | 367 | 0.40 |
| Athletics Fields Turf | Excavators | Diesel | Average | 1.00 | 0.99 | 158 | 0.38 |
| Athletics Fields Turf | Plate Compactors | Diesel | Average | 1.00 | 1.53 | 8.00 | 0.43 |
| Athletics Fields Turf | Pumps | Diesel | Average | 1.00 | 0.12 | 11.0 | 0.74 |
| Athletics Fields Turf | Rollers | Diesel | Average | 1.00 | 1.53 | 36.0 | 0.38 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Athletics Fields Turf | Rough Terrain Forklifts | Diesel | Average | 1.00 | 0.80 | 96.0 | 0.40 |
| Athletics Fields Turf | Signal Boards | Diesel | Average | 1.00 | 3.36 | 6.00 | 0.82 |
| Paving | Cement and Mortar Mixers | Diesel | Average | 0.00 | 6.00 | 10.0 | 0.56 |
| Paving | Pavers | Diesel | Average | 0.00 | 6.00 | 81.0 | 0.42 |
| Paving | Paving Equipment | Diesel | Average | 0.00 | 8.00 | 89.0 | 0.36 |
| Paving | Rollers | Diesel | Average | 0.00 | 7.00 | 36.0 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | Diesel | Average | 0.00 | 8.00 | 84.0 | 0.37 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Aquatics Center | — | — | — | — |
| Aquatics Center | Worker | 11.6 | 11.7 | LDA,LDT1,LDT2 |
| Aquatics Center | Vendor | 0.30 | 8.40 | HHDT,MHDT |
| Aquatics Center | Hauling | 2.70 | 20.0 | HHDT |
| Aquatics Center | Onsite truck | — | — | HHDT |
| Arts Building and Performing Arts Plaza | — | — | — | — |
| Arts Building and Performing Arts Plaza | Worker | 11.3 | 11.7 | LDA,LDT1,LDT2 |
| Arts Building and Performing Arts Plaza | Vendor | 0.30 | 8.40 | HHDT,MHDT |
| Arts Building and Performing Arts Plaza | Hauling | 2.10 | 20.0 | HHDT |
| Arts Building and Performing Arts Plaza | Onsite truck | — | — | HHDT |
| Athletics Fields Turf | — | — | — | — |
| Athletics Fields Turf | Worker | 9.50 | 11.7 | LDA,LDT1,LDT2 |
| Athletics Fields Turf | Vendor | 0.30 | 8.40 | HHDT,MHDT |
| Athletics Fields Turf | Hauling | 10.8 | 20.0 | HHDT |

| | | | | |
|---|---|---|---|---|
| Athletics Fields Turf | Onsite truck | — | — | HHDT |
| Paving | — | — | — | — |
| Paving | Worker | 0.00 | 11.7 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 8.40 | HHDT,MHDT |
| Paving | Hauling | 0.00 | 20.0 | HHDT |
| Paving | Onsite truck | — | — | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

## 5.5. Architectural Coatings

| Phase Name | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|
| Aquatics Center | 0.00 | 0.00 | 15,000 | 5,000 | — |
| Arts Building and Performing Arts Plaza | 0.00 | 0.00 | 33,000 | 11,000 | — |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (Cubic Yards) | Material Exported (Cubic Yards) | Acres Graded (acres) | Material Demolished (Ton of Debris) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Aquatics Center | 1,600 | 8,000 | 10.0 | 1,120 | — |
| Arts Building and Performing Arts Plaza | 1,060 | 5,300 | 10.5 | 9,400 | — |
| Athletics Fields Turf | 2,240 | 11,200 | 7.53 | 0.00 | — |
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.53 |

#### 5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

### 5.7. Construction Paving

| Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|
| High School | 0.53 | 100% |

### 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2024 | 4.25 | 204 | 0.03 | < 0.005 |
| 2025 | 33.7 | 204 | 0.03 | < 0.005 |
| 2026 | 29.5 | 204 | 0.03 | < 0.005 |
| 2028 | 0.00 | 204 | 0.03 | < 0.005 |

### 5.18. Vegetation

#### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

#### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 8. User Changes to Default Data

| Screen | Justification |
|---|---|
| Land Use | Land use information was based on the project description. Lot acreage of the new aquatic center was estimated based on site plan and Google Earth. The recreational building area includes the 2,100 sq ft storage building and the 7,900 sq ft athletic clubhouse. Lot acreage of the new Arts Building and the Performing Arts Plaza includes the building footprint of the new Arts Building (estimated based on Google Earth and Figure 3-2), 14,000 sq ft of site work and landscaping area, and 23,000 sq ft of the plaza. It was conservatively assumed that the landscape area for the Arts Building and the Performing Arts Plaza is 14,000 sq ft. |
| Construction: Construction Phases | The District provided construction off-road equipment activity and construction duration. The paving phase was created so the model would calculate VOC emissions from asphalt paving for the Aquatics Center and Arts Building and PA Plaza phases. No construction off-road equipment and vehicle trips were assigned to the paving phase. |
| Construction: Off-Road Equipment | Project-specific off-road construction equipment activity data provided by the District. |
| Construction: Demolition | For fugitive dust calculation:<br><br>Aquatics Center:<br>Existing pool assumption: (Area of the existing pool) (unit conversion from square feet of floor space to short ton of waste material) = (6,600 sqft)(0.046 short ton/sqft) = 304 tons.<br>Asphalt demo assumption:(Area of pavement)(Depth of pavement)(Density asphalt) = (45 KSF)(0.25 ft)(0.0725 tons/ft^3) =816 tons<br>The existing pool area and surrounding pavement areas were estimated using Google Earth.<br><br>Arts Building and PA Plaza:<br>The building square footage of the AR building was obtained from the San Rafael Master Facilities Long-Range Plan EIR. |
| Construction: Trips and VMT | Construction vehicle trips are provided by the District. |

| | |
|---|---|
| Construction: Architectural Coatings | Aquatics Center: For the chemical storage/pump/equipment storage building (2,100 sqft) and the new athletic clubhouse (7,900 sqft)<br>Arts Building and PA Plaza: For the new Arts Building |
| Construction: Dust From Material Movement | Estimated cut volumes were provided by the District. It was assumed that the fill materials are about 20% of the cut volume for each project. |
| Construction: Paving | Conservatively assumed the new Performing Arts Plaza would contain 100% asphalt. |

## Construction Off-Road Equipment Activity (Total Hours per Month)

| Construction Phase | Equipment Type | CalEEMod Equipment Type | Fuel Type | CalEEMod 2022 Default Horsepower[1] | Default Engine Tier | 2024 | | | | | | | 2025 | | | | | | | | | Duration (day) | Average Hours per day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | | |
| Aquatic Center | Aerial Lifts | Areial Lifts | Electric | 46 | Average | 20 | 20 | 20 | 20 | | | | | | | | | 20 | 20 | 20 | | 347 | 0.40 |
| | Bore/Drill Rigs | Bore/Drill Rigs | Diesel | 83 | Average | | | | 100 | | | | | | | | | | | | | | 0.29 |
| | Cement and Mortar Mixers | Cement and Mortar Mixers | Diesel | 10 | Average | | | | | | | | | | | | | 20 | | | | | 0.06 |
| | Cranes | Cranes | Diesel | 367 | Average | | | 8 | | | | | | 20 | 20 | 20 | | 8 | | | | | 0.22 |
| | Excavators | Excavators | Diesel | 158 | Average | 100 | 100 | 100 | 80 | 80 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | | | 1.84 |
| | Paving Equipment | Paving Equipment | Diesel | 89 | Average | | | | | | | | | | | | | 16 | | | 8 | | 0.07 |
| | Plate Compactors | Plate Compactors | Diesel | 8 | Average | 8 | 8 | 8 | 8 | 8 | | | | | 8 | 8 | 8 | 8 | | | | | 0.21 |
| | Rough Terrain Forklifts | Rough Terrain Forklifts | Diesel | 100 | Average | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | | | 1.73 |
| | Rubber Tired Dozers | Rubber Tired Dozers | Diesel | 367 | Average | | 20 | 20 | 20 | 20 | 20 | 10 | 10 | 10 | 10 | 10 | 10 | | | | | | 0.46 |
| | Skid Steer Loaders | Skid Steer Loaders | Diesel | 71 | Average | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 60 | 40 | | | 3.29 |
| | Tractors/Loaders/Backhoes | Tractors/Loaders/Backhoes | Diesel | 84 | Average | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 20 | 10 | | | 1.59 |
| | Welders | Welders | Diesel | 46 | Average | | | | | | | | | | | 40 | 40 | 40 | | | | | 0.35 |

Note: CalEEMod default values were used as project-specific hoursepower data were not available. Assumed diesel engine to be conservative when fuel type is unknown.

[1]CalEEMod 2020 default horsepower was used for excavators. CalEEMod 2022 default horsepower was used for other type of equipment.

## Construction Off-Road Equipment Activity (Total Hours per Month)

| Construction Phase | Equipment Type | CalEEMod Equipment Type | Default Fuel Type | CalEEMod 2022 Default Horsepower[1] | Default Engine Tier | 2025 | | | | | | | 2026 | | | | | | | | | | | Duration (day) | Average Hours per day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | | |
| Visual and Performing Arts Building and Plaza (VAPA) | Aerial Lifts | Areial Lifts | Electric | 46 | Average | | | | | | | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 40 | 20 | 5 | 391 | 2.01 |
| | Air Compressors | Air Compressors | Electric | 37 | Average | | | | | | | | | | | 40 | 40 | 40 | 40 | 40 | 40 | | | | 0.61 |
| | Bore/Drill Rigs | Bore/Drill Rigs | Diesel | 83 | Average | | | | 100 | | | | | | | | | | | | | | | | 0.26 |
| | Crawler Tractors | Crawler Tractors | Diesel | 87 | Average | | | | | | 80 | 80 | | | | | | | | | 8 | | | | 0.43 |
| | Excavators | Excavators | Diesel | 158 | Average | 100 | 100 | 100 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | | | | 1.38 |
| | Plate Compactors | Plate Compactors | Diesel | 8 | Average | | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | | 0.77 |
| | Pumps | Pumps | Diesel | 11 | Average | | | | 40 | | | 40 | | | 20 | | 20 | | 20 | 20 | | | | | 0.41 |
| | Rollers | Rollers | Diesel | 36 | Average | | | | 40 | 40 | 40 | 40 | | | | | 40 | | 40 | 40 | | | | | 0.72 |
| | Rough Terrain Forklifts | Rough Terrain Forklifts | Diesel | 96 | Average | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 20 | 20 | 20 | 20 | | | | 1.43 |
| | Skid Steer Loaders | Skid Steer Loaders | Diesel | 71 | Average | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 20 | | | 2.51 |
| | Tractors/Loaders/Backhoes | Tractors/Loaders/Backhoes | Diesel | 84 | Average | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | | | | | | 1.43 |
| | Welders | Welders | Diesel | 46 | Average | | | | | | 60 | 60 | 60 | | | | | | | | | | | | 0.46 |

Note: CalEEMod default values were used as project-specific hoursepower data were not available. Assumed diesel engine to be conservative when fuel type is unknown.

[1]CalEEMod 2020 default horsepower was used for excavators. CalEEMod 2022 default horsepower was used for other type of equipment.

## Construction Off-Road Equipment Activity (Total Hours per Month)

| Construction Phase | Equipment Type | CalEEMod Equipment Type | Default Fuel Type | CalEEMod 2022 Default Horsepower[1] | Default Engine Tier | 2028 | | | | | | Duration (day) | Average Hours per day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Jun | Jul | Aug | Sept | Oct | Nov | | |
| Athletic Fields Turf | Excavators | Excavators | Diesel | 158 | Average | 40 | 40 | 40 | 10 | | | 131 | 0.99 |
| | Graders | Graders | Diesel | 148 | Average | 40 | 40 | 40 | | | | | 0.92 |
| | Plate Compactors | Plate Compactors | Diesel | 8 | Average | 40 | 40 | 40 | 40 | 40 | | | 1.53 |
| | Pumps | Pumps | Diesel | 11 | Average | | | 16 | | | | | 0.12 |
| | Rollers | Rollers | Diesel | 36 | Average | 40 | 40 | 40 | 40 | 40 | | | 1.53 |
| | Rough Terrain Forklifts | Rough Terrain Forklifts | Diesel | 96 | Average | 20 | 20 | 20 | 20 | 20 | 5 | | 0.80 |
| | Signal Boards | Signal Boards | Diesel | 6 | Average | 80 | 80 | 80 | 80 | 80 | 40 | | 3.36 |
| | Tractors/Loaders/Backhoes | Tractors/Loaders/Backhoes | Diesel | ele | Average | 60 | 60 | 60 | 60 | 60 | 30 | | 2.52 |

Note: CalEEMod default values were used as project-specific hoursepower data were not available. Assumed diesel engine to be conservative when fuel type is unknown.

[1]CalEEMod 2020 default horsepower was used for excavators. CalEEMod 2022 default horsepower was used for other type of equipment.

## Construction Vehicle Trip Activity (Total Round Trips per Month)

**Aquatic Center**

| | Fleet Mix (percentage) | | | | 2024 | | | | | | | 2025 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Vehicle Trip Activity** | **LDA** | **LHD** | **MHD** | **HHD** | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct |
| Worker Commute Trips | 100% | | | | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 130 | 130 | 130 |
| Vendor Trips | | 50% | 50% | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 2 | 2 | 2 |
| Demolition Haul Trips | | | | 100% | 100 | 100 | 100 | 100 | 50 | 50 | 50 | 50 | 50 | 50 | | | | | | | |
| Soil Haul Trips | | | | 100% | | | 20 | 20 | 20 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | | | | | |
| Concrete Trucks Trips | | | | 100% | | | | 20 | 20 | 20 | | | | | | | 20 | 20 | | | |

**VAPA**

| | Fleet Mix (percentage) | | | | 2025 | | | | | | | 2026 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Vehicle Trip Activity** | **LDA** | **LHD** | **MHD** | **HHD** | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov |
| Worker Commute Trips | 100% | | | | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 130 | 130 |
| Vendor Trips | | 50% | 50% | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 2 | 2 |
| Demolition Haul Trips | | | | 100% | 100 | 100 | 100 | 50 | 50 | 50 | 50 | 50 | 50 | | | | | | | | | |
| Soil Haul Trips | | | | 100% | | | 30 | 30 | 30 | 30 | 30 | | | | | | | | | | | |
| Concrete Trucks Trips | | | | 100% | | | | 20 | 20 | 20 | | | | | | 10 | | | | | | |

**Turf**

| | Fleet Mix (percentage) | | | | 2028 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Vehicle Trip Activity** | **LDA** | **LHD** | **MHD** | **HHD** | Jun | Jul | Aug | Sept | Oct | Nov | Dec |
| Worker Commute Trips | 100% | | | | 260 | 260 | 260 | 260 | 130 | 60 | 20 |
| Vendor Trips | | 50% | 50% | | 8 | 8 | 8 | 8 | 4 | 2 | |
| Demolition Haul Trips | | | | 100% | 220 | 220 | 220 | 220 | 220 | | |
| Soil Haul Trips | | | | 100% | | | 100 | 100 | 100 | | |
| Concrete Trucks Trips | | | | 100% | | | 10 | | | | |

| **Trip Category** | **Aquatic Center** | | **VAPA** | | **Turf** | |
|---|---|---|---|---|---|---|
| | **Trips per day** | **Trip length (mile)** | **Trips per day** | **Trip length (mile)** | **Trips per day** | **Trip length (mile)** |
| **Worker commute** | 11.6 | 11.7 | 11.3 | 11.7 | 9.5 | 11.7 |
| **Vendor** | 0.3 | 8.4 | 0.3 | 8.4 | 0.3 | 8.4 |
| **Hauling** | 2.7 | 20.0 | 2.1 | 20.0 | 10.8 | 20.0 |

# SRHS_Operation v2 Custom Report

## Table of Contents

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | SRHS_Operation v2 |
| Operational Year | 2026 |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 3.60 |
| Precipitation (days) | 5.60 |
| Location | 150 3rd St, San Rafael, CA 94901, USA |
| County | Marin |
| City | San Rafael |
| Air District | Bay Area AQMD |
| Air Basin | San Francisco Bay Area |
| TAZ | 919 |
| EDFZ | 2 |
| Electric Utility | Pacific Gas & Electric Company |
| Gas Utility | Pacific Gas & Electric |
| App Version | 2022.1.1.21 |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Recreational Swimming Pool | 10.0 | 1000sqft | 2.40 | 10,000 | 5,000 | 0.00 | — | New Aquatic Center |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| High School | 12.0 | 1000sqft | 0.90 | 12,000 | 14,000 | 14,000 | — | Arts Building and Performing Arts Plaza |
| Golf Course | 4.60 | Acre | 4.60 | 0.00 | 0.00 | 0.00 | — | New artificial turf for the existing baseball and softball fields |

## 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

## 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.04 | 0.04 | 0.02 | 0.24 | < 0.005 | < 0.005 | 0.05 | 0.05 | < 0.005 | 0.01 | 0.01 | — | 51.3 | 51.3 | < 0.005 | < 0.005 | 0.18 | 52.2 |
| Area | 0.17 | 0.69 | 0.01 | 0.96 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.93 | 3.93 | < 0.005 | < 0.005 | — | 3.95 |
| Energy | 0.02 | 0.01 | 0.14 | 0.12 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 199 | 199 | 0.02 | < 0.005 | — | 200 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 1.90 | 4.40 | 6.30 | 0.20 | < 0.005 | — | 12.6 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 41.4 | 0.00 | 41.4 | 4.14 | 0.00 | — | 145 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.09 | 0.09 |
| Stationary | 0.30 | 0.15 | 0.00 | 2.69 | 0.02 | 0.21 | 0.00 | 0.21 | 0.21 | 0.00 | 0.21 | 0.00 | 3,294 | 3,294 | 0.06 | 0.04 | 0.00 | 3,308 |
| Total | 0.53 | 0.89 | 0.17 | 4.01 | 0.02 | 0.22 | 0.05 | 0.27 | 0.22 | 0.01 | 0.23 | 43.3 | 3,553 | 3,596 | 4.42 | 0.05 | 0.28 | 3,721 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.04 | 0.04 | 0.03 | 0.25 | < 0.005 | < 0.005 | 0.05 | 0.05 | < 0.005 | 0.01 | 0.01 | — | 48.6 | 48.6 | < 0.005 | < 0.005 | < 0.005 | 49.4 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | — | 0.53 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 0.02 | 0.01 | 0.14 | 0.12 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 199 | 199 | 0.02 | < 0.005 | — | 200 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 1.90 | 4.40 | 6.30 | 0.20 | < 0.005 | — | 12.6 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 41.4 | 0.00 | 41.4 | 4.14 | 0.00 | — | 145 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.09 | 0.09 |
| Stationary | 0.30 | 0.15 | 0.00 | 2.69 | 0.02 | 0.21 | 0.00 | 0.21 | 0.21 | 0.00 | 0.21 | 0.00 | 3,294 | 3,294 | 0.06 | 0.04 | 0.00 | 3,308 |
| Total | 0.36 | 0.73 | 0.17 | 3.06 | 0.02 | 0.22 | 0.05 | 0.27 | 0.22 | 0.01 | 0.23 | 43.3 | 3,546 | 3,589 | 4.42 | 0.05 | 0.10 | 3,714 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.04 | 0.04 | 0.02 | 0.23 | < 0.005 | < 0.005 | 0.05 | 0.05 | < 0.005 | 0.01 | 0.01 | — | 48.7 | 48.7 | < 0.005 | < 0.005 | 0.08 | 49.6 |
| Area | 0.08 | 0.61 | < 0.005 | 0.47 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 1.94 | 1.94 | < 0.005 | < 0.005 | — | 1.95 |
| Energy | 0.02 | 0.01 | 0.14 | 0.12 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 199 | 199 | 0.02 | < 0.005 | — | 200 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 1.90 | 4.40 | 6.30 | 0.20 | < 0.005 | — | 12.6 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 41.4 | 0.00 | 41.4 | 4.14 | 0.00 | — | 145 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.09 | 0.09 |
| Stationary | 0.18 | 0.09 | 0.00 | 1.59 | 0.01 | 0.12 | 0.00 | 0.12 | 0.12 | 0.00 | 0.12 | 0.00 | 1,949 | 1,949 | 0.04 | 0.02 | 0.00 | 1,957 |
| Total | 0.32 | 0.75 | 0.17 | 2.42 | 0.01 | 0.14 | 0.05 | 0.18 | 0.14 | 0.01 | 0.15 | 43.3 | 2,203 | 2,247 | 4.40 | 0.03 | 0.17 | 2,366 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.01 | 0.01 | < 0.005 | 0.04 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 8.07 | 8.07 | < 0.005 | < 0.005 | 0.01 | 8.21 |
| Area | 0.02 | 0.11 | < 0.005 | 0.09 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.32 | 0.32 | < 0.005 | < 0.005 | — | 0.32 |
| Energy | < 0.005 | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 32.9 | 32.9 | < 0.005 | < 0.005 | — | 33.1 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 0.31 | 0.73 | 1.04 | 0.03 | < 0.005 | — | 2.08 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 6.86 | 0.00 | 6.86 | 0.69 | 0.00 | — | 24.0 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.02 | 0.02 |
| Stationary | 0.03 | 0.02 | 0.00 | 0.29 | < 0.005 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 0.00 | 323 | 323 | 0.01 | < 0.005 | 0.00 | 324 |
| Total | 0.06 | 0.14 | 0.03 | 0.44 | < 0.005 | 0.02 | 0.01 | 0.03 | 0.02 | < 0.005 | 0.03 | 7.17 | 365 | 372 | 0.73 | 0.01 | 0.03 | 392 |

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

### 4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Recreational Swimming Pool | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| High School | — | — | — | — | — | — | — | — | — | — | — | — | 30.2 | 30.2 | < 0.005 | < 0.005 | — | 30.5 |
| Golf Course | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 30.2 | 30.2 | < 0.005 | < 0.005 | — | 30.5 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Recreational Swimming Pool | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High School | — | — | — | — | — | — | — | — | — | — | — | — | 30.2 | 30.2 | < 0.005 | < 0.005 | — | 30.5 |
| Golf Course | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 30.2 | 30.2 | < 0.005 | < 0.005 | — | 30.5 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Recreational Swimming Pool | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| High School | — | — | — | — | — | — | — | — | — | — | — | — | 5.00 | 5.00 | < 0.005 | < 0.005 | — | 5.05 |
| Golf Course | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 5.00 | 5.00 | < 0.005 | < 0.005 | — | 5.05 |

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Recreational Swimming Pool | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| High School | 0.02 | 0.01 | 0.14 | 0.12 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 169 | 169 | 0.01 | < 0.005 | — | 169 |
| Golf Course | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.02 | 0.01 | 0.14 | 0.12 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 169 | 169 | 0.01 | < 0.005 | — | 169 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Recreational Swimming Pool | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| High School | 0.02 | 0.01 | 0.14 | 0.12 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 169 | 169 | 0.01 | < 0.005 | — | 169 |
| Golf Course | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.02 | 0.01 | 0.14 | 0.12 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 169 | 169 | 0.01 | < 0.005 | — | 169 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Recreational Swimming Pool | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| High School | < 0.005 | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 27.9 | 27.9 | < 0.005 | < 0.005 | — | 28.0 |
| Golf Course | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | < 0.005 | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 27.9 | 27.9 | < 0.005 | < 0.005 | — | 28.0 |

## 4.3. Area Emissions by Source

### 4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Consum Products | — | 0.47 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.06 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.17 | 0.16 | 0.01 | 0.96 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.93 | 3.93 | < 0.005 | < 0.005 | — | 3.95 |
| Total | 0.17 | 0.69 | 0.01 | 0.96 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.93 | 3.93 | < 0.005 | < 0.005 | — | 3.95 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | — | 0.47 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.06 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | 0.53 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | — | 0.09 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.01 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.02 | 0.01 | < 0.005 | 0.09 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.32 | 0.32 | < 0.005 | < 0.005 | — | 0.32 |
| Total | 0.02 | 0.11 | < 0.005 | 0.09 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.32 | 0.32 | < 0.005 | < 0.005 | — | 0.32 |

## 4.4. Water Emissions by Land Use

### 4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Recreational Swimming Pool | — | — | — | — | — | — | — | — | — | — | — | 1.13 | 2.25 | 3.39 | 0.12 | < 0.005 | — | 7.14 |
| High School | — | — | — | — | — | — | — | — | — | — | — | 0.76 | 2.15 | 2.91 | 0.08 | < 0.005 | — | 5.44 |
| Golf Course | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1.90 | 4.40 | 6.30 | 0.20 | < 0.005 | — | 12.6 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Recreational Swimming Pool | — | — | — | — | — | — | — | — | — | — | — | 1.13 | 2.25 | 3.39 | 0.12 | < 0.005 | — | 7.14 |
| High School | — | — | — | — | — | — | — | — | — | — | — | 0.76 | 2.15 | 2.91 | 0.08 | < 0.005 | — | 5.44 |
| Golf Course | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1.90 | 4.40 | 6.30 | 0.20 | < 0.005 | — | 12.6 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Recreational Swimming | — | — | — | — | — | — | — | — | — | — | — | 0.19 | 0.37 | 0.56 | 0.02 | < 0.005 | — | 1.18 |
| High School | — | — | — | — | — | — | — | — | — | — | — | 0.13 | 0.36 | 0.48 | 0.01 | < 0.005 | — | 0.90 |
| Golf Course | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 0.31 | 0.73 | 1.04 | 0.03 | < 0.005 | — | 2.08 |

## 4.5. Waste Emissions by Land Use

### 4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Recreational Swimming Pool | — | — | — | — | — | — | — | — | — | — | — | 30.7 | 0.00 | 30.7 | 3.07 | 0.00 | — | 107 |
| High School | — | — | — | — | — | — | — | — | — | — | — | 8.41 | 0.00 | 8.41 | 0.84 | 0.00 | — | 29.4 |
| Golf Course | — | — | — | — | — | — | — | — | — | — | — | 2.31 | 0.00 | 2.31 | 0.23 | 0.00 | — | 8.07 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 41.4 | 0.00 | 41.4 | 4.14 | 0.00 | — | 145 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Recreational Swimmin Pool | — | — | — | — | — | — | — | — | — | — | — | 30.7 | 0.00 | 30.7 | 3.07 | 0.00 | — | 107 |
| High School | — | — | — | — | — | — | — | — | — | — | — | 8.41 | 0.00 | 8.41 | 0.84 | 0.00 | — | 29.4 |
| Golf Course | — | — | — | — | — | — | — | — | — | — | — | 2.31 | 0.00 | 2.31 | 0.23 | 0.00 | — | 8.07 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 41.4 | 0.00 | 41.4 | 4.14 | 0.00 | — | 145 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Recreational Swimming Pool | — | — | — | — | — | — | — | — | — | — | — | 5.09 | 0.00 | 5.09 | 0.51 | 0.00 | — | 17.8 |
| High School | — | — | — | — | — | — | — | — | — | — | — | 1.39 | 0.00 | 1.39 | 0.14 | 0.00 | — | 4.87 |
| Golf Course | — | — | — | — | — | — | — | — | — | — | — | 0.38 | 0.00 | 0.38 | 0.04 | 0.00 | — | 1.34 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 6.86 | 0.00 | 6.86 | 0.69 | 0.00 | — | 24.0 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Recreational Swimming Pool | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.05 | 0.05 |
| High School | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.05 | 0.05 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.09 | 0.09 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Recreational Swimming Pool | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.05 | 0.05 |
| High School | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.05 | 0.05 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.09 | 0.09 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Recreational Swimming Pool | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 | 0.01 |
| High School | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 | 0.01 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.02 | 0.02 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 4.8. Stationary Emissions By Equipment Type

## 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Process Boiler | 0.30 | 0.15 | 0.00 | 2.69 | 0.02 | 0.21 | 0.00 | 0.21 | 0.21 | 0.00 | 0.21 | 0.00 | 3,294 | 3,294 | 0.06 | 0.04 | 0.00 | 3,308 |
| Total | 0.30 | 0.15 | 0.00 | 2.69 | 0.02 | 0.21 | 0.00 | 0.21 | 0.21 | 0.00 | 0.21 | 0.00 | 3,294 | 3,294 | 0.06 | 0.04 | 0.00 | 3,308 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Process Boiler | 0.30 | 0.15 | 0.00 | 2.69 | 0.02 | 0.21 | 0.00 | 0.21 | 0.21 | 0.00 | 0.21 | 0.00 | 3,294 | 3,294 | 0.06 | 0.04 | 0.00 | 3,308 |
| Total | 0.30 | 0.15 | 0.00 | 2.69 | 0.02 | 0.21 | 0.00 | 0.21 | 0.21 | 0.00 | 0.21 | 0.00 | 3,294 | 3,294 | 0.06 | 0.04 | 0.00 | 3,308 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Process Boiler | 0.03 | 0.02 | 0.00 | 0.29 | < 0.005 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 0.00 | 323 | 323 | 0.01 | < 0.005 | 0.00 | 324 |
| Total | 0.03 | 0.02 | 0.00 | 0.29 | < 0.005 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 0.00 | 323 | 323 | 0.01 | < 0.005 | 0.00 | 324 |

## 4.9. User Defined Emissions By Equipment Type

### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10. Soil Carbon Accumulation By Vegetation Type

### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Total all Land Uses | 12.9 | 12.9 | 12.9 | 4,709 | 66.0 | 66.0 | 66.0 | 24,090 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

#### 5.10.1.1. Unmitigated

### 5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|
| 0 | 0.00 | 33,000 | 11,000 | — |

### 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 180 |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Recreational Swimming Pool | 0.00 | 204 | 0.0330 | 0.0040 | 0.00 |
| High School | 54,053 | 204 | 0.0330 | 0.0040 | 526,686 |
| Golf Course | 0.00 | 204 | 0.0330 | 0.0040 | 0.00 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Recreational Swimming Pool | 591,431 | 41,164 |
| High School | 398,456 | 256,134 |
| Golf Course | 0.00 | 0.00 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Recreational Swimming Pool | 57.0 | — |
| High School | 15.6 | — |
| Golf Course | 4.28 | — |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use Type | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Recreational Swimming Pool | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |
| Recreational Swimming Pool | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | 0.04 | 1.00 | 0.00 | 1.00 |
| High School | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| High School | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |
| High School | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | < 0.005 | 1.00 | 0.00 | 1.00 |
| High School | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.50 | 7.50 | 20.0 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

### 5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| Boiler - CNG (0–2 MMBTU) | CNG | 2.00 | 1.75 | 14.0 | 3,024 |

## 5.17. User Defined

| Equipment Type | Fuel Type |
|---|---|

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 8. User Changes to Default Data

| Screen | Justification |
|---|---|

| | |
|---|---|
| Land Use | Land use information was based on the project description. Lot acreage of the new aquatic center was estimated based on site plan and Google Earth. The recreational building area includes the 2,100 sq ft storage building and the 7,900 sq ft athletic clubhouse. Lot acreage of the new Arts Building and the Performing Arts Plaza includes the building footprint of the new Arts Building, 14,000 sq ft of site work and landscaping area, and 23,000 sq ft of the plaza. It was conservatively assumed that the landscape area for the Arts Building and the Performing Arts Plaza is 14,000 sq ft. The new Arts Building footprint was estimated based on Google Earth and Figure 3-2. |
| Construction: Construction Phases | The District provided construction off-road equipment activity and construction duration. The paving phase was created to calculate VOC emissions from asphalt paving. No construction off-road equipment and vehicle trips were assigned to the paving phase. The construction equipment used for paving is included in the Aquatics Center, Arts Building and PA Plaza, and Athletics Fields Turf phases. |
| Construction: Off-Road Equipment | Project-specific off-road construction equipment activity data provided by the District. |
| Construction: Demolition | Aquatics Center:<br>Existing pool assumption: (Area of the existing pool) (unit conversion from square feet of floor space to short ton of waste material) = (6,600 sqft)(0.046 short ton/sqft) = 304 tons.<br>Asphalt demo assumption:(Area of pavement)(Depth of pavement)(Density asphalt) = (45 KSF)(0.25 ft)(0.0725 tons/ft^3) =816 tons<br>The existing pool area and surrounding pavement areas were estimated using Google Earth.<br><br>Arts Building and PA Plaza:<br>The building square footage of the existing art building was obtained from the San Rafael Master Facilities Long-Range Plan EIR. |
| Construction: Trips and VMT | Construction vehicle trips are provided by the District. |
| Construction: Architectural Coatings | Aquatics Center: For the chemical storage/pump/equipment storage building (2,100 sqft) and the new athletic clubhouse (7,900 sqft)<br>Arts Building and PA Plaza: For the new Arts Building |
| Construction: Dust From Material Movement | Estimated cut volumes were provided by the District. It was assumed that the fill materials are about 20% of the cut volume for each project. |
| Construction: Paving | Conservatively assumed the new Performing Arts Plaza would contain 100% asphalt. |
| Operations: Refrigerants | No refrigerants for Athletics Firlds |

**Summary of ISCST3 Model Parameters, Assumptions, and Results for DPM and PM2.5 Emissions from Construction**

| **ISCST3 Model Parameters and Assumptions** | | | |
|---|---|---|---|
| **Source Type** | **Units** | **Value** | **Notes** |
| **Area Source: Off-Road Equipment Exhaust (DPM)** | | | |
| Average Hours/Work Day | hours/day | 8.8 | Monday to Friday: 8 am to 5 pm; Saturday: 9 am to 5 pm |
| DPM Emission Rate - Aquatic Center | gram/second | 0.00121 | Exhaust PM10 from off-road construction equipment |
| DPM Emission Rate - Arts Building and Performing Arts Plaza | gram/second | 0.00066 | Exhaust PM10 from off-road construction equipment |
| DPM Emission Rate - Athletic Fields Turf | gram/second | 0.00063 | Exhaust PM10 from off-road construction equipment. Assumed the emissions from each field are the same. Emission rate for each field is 0.00063/2=0.00031 gram/second |
| Release Height | meters | 5.0 | SMAQMD, 2015 |
| Initial Vertical Dimension | meters | 1.4 | USEPA, 2022 |
| **Area Source: On-Site Fugitive PM2.5** | | | |
| Fugitive PM2.5 Emission Rate - Aquatic Center | gram/second | 0.0029 | Fugitive PM2.5 from on-site construction activities. |
| Fugitive PM2.5 Emission Rate - Arts Building and Performing Arts Plaza | gram/second | 0.00010 | Fugitive PM2.5 from on-site construction activities. |
| Fugitive PM2.5 Emission Rate - Athletic Fields Turf | gram/second | 0.00011 | Fugitive PM2.5 from on-site construction activities. Assumed the emissions from each field are the same. Emission rate for each field is 0.00011/2=0.000056 gram/second |
| Release Height | meters | 0.0 | SMAQMD, 2015 |
| Initial Vertical Dimension | meters | 1.0 | SMAQMD, 2015 |
| **ISCST3 Model Results** | | | |
| **Sensitive Receptor** | **Pollutant** | **Annual Average Concentration** | **Notes** |
| MEIR (Aquatic Center Construction) | DPM ($\mu g/m^3$) | 0.0038 | Nearest residential receptor - Concentration due to Aquatic Center construction |
| | PM2.5 ($\mu g/m^3$) | 0.0141 | Nearest residential receptor - Concentration due to Aquatic Center construction |
| MEIR (Arts Building and Performing Arts Plaza Construction) | DPM ($\mu g/m^3$) | 0.0205 | Nearest residential receptor - Concentration due to Arts Building and Performing Arts Plaza construction |
| | PM2.5 ($\mu g/m^3$) | 0.0262 | Nearest residential receptor - Concentration due to Arts Building and Performing Arts Plaza construction |
| MEIR ( Athletic Fields Turf Construction) | DPM ($\mu g/m^3$) | 0.0007 | Nearest residential receptor - Concentration due to Athletic Fields Turf construction |
| | PM2.5 ($\mu g/m^3$) | 0.0009 | Nearest residential receptor - Concentration due to Athletic Fields Turf construction |
| MEIS (Aquatic Center Construction) | DPM ($\mu g/m^3$) | 0.0058 | Nearest student receptor - Concentration due to Aquatic Center construction |
| | PM2.5 ($\mu g/m^3$) | 0.0252 | Nearest student receptor - Concentration due to Aquatic Center construction |
| MEIS (Arts Building and Performing Arts Plaza Construction) | DPM ($\mu g/m^3$) | 0.0573 | Nearest student receptor - Concentration due to Arts Building and Performing Arts Plaza construction |
| | PM2.5 ($\mu g/m^3$) | 0.0814 | Nearest student receptor - Concentration due to Arts Building and Performing Arts Plaza construction |
| MEIS ( Athletic Fields Turf Construction) | DPM ($\mu g/m^3$) | 0.0010 | Nearest student receptor - Concentration due to Athletic Fields Turf construction |
| | PM2.5 ($\mu g/m^3$) | 0.0012 | Nearest student receptor - Concentration due to Athletic Fields Turf construction |
| MEIW (Aquatic Center Construction) | DPM ($\mu g/m^3$) | 0.0014 | Nearest offsite worker - Concentration due to Aquatic Center construction |
| | PM2.5 ($\mu g/m^3$) | 0.0050 | Nearest offsite worker - Concentration due to Aquatic Center construction |
| MEIW (Arts Building and Performing Arts Plaza Construction) | DPM ($\mu g/m^3$) | 0.0015 | Nearest offsite worker - Concentration due to Arts Building and Performing Arts Plaza construction |
| | PM2.5 ($\mu g/m^3$) | 0.0018 | Nearest offsite worker - Concentration due to Arts Building and Performing Arts Plaza construction |
| MEIW ( Athletic Fields Turf Construction) | DPM ($\mu g/m^3$) | 0.0078 | Nearest offsite worker - Concentration due to Athletic Fields Turf construction |
| | PM2.5 ($\mu g/m^3$) | 0.0095 | Nearest offsite worker - Concentration due to Athletic Fields Turf construction |

Notes:

DPM = diesel particulate matter

$PM_{10}$ = particulate matter with aerodynamic resistance diameters equal to or less than 10 microns

$PM_{2.5}$ = particulate matter with aerodynamic resistance diameters equal to or less than 2.5 microns

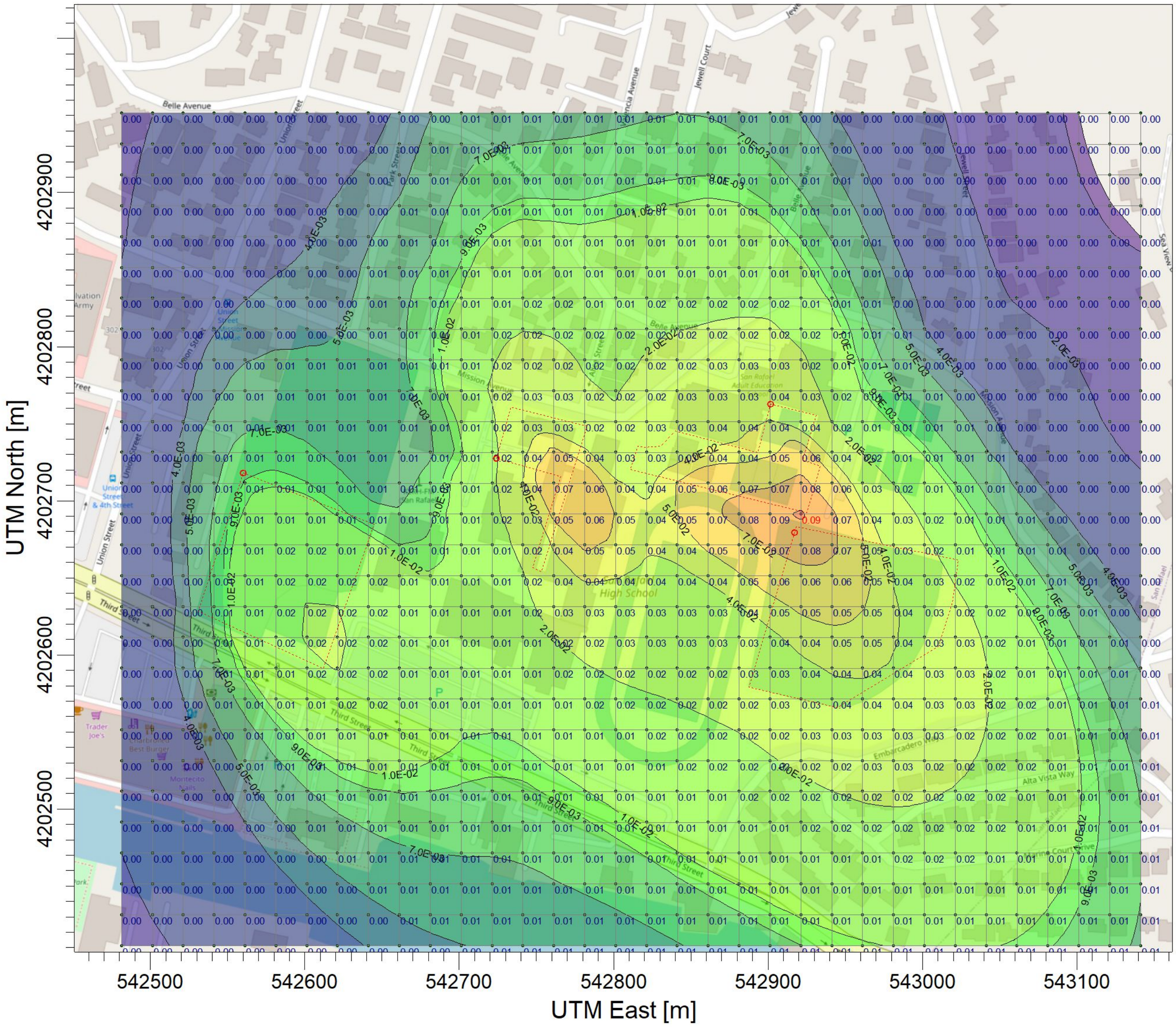
$\mu g/m^3$ = micrograms per cubic meter

Sacramento Metropolitan Air Quality Management District (SMAQMD), 2015. *Guide to Air Quality Assessment in Sacramento County* . June.

U.S. Environmental Protection Agency (USEPA), 2022. User's Guide for the AMS/EPA Regulatory Model (AERMOD).

PROJECT TITLE: San Rafael High School Supplemental EIR

## San Rafael High School Supplemental EIR
## Construction exhaust_All




PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: ALL ug/m^3

Max: 9.2E-02 [ug/m^3] at (542921.25, 4202691.50)

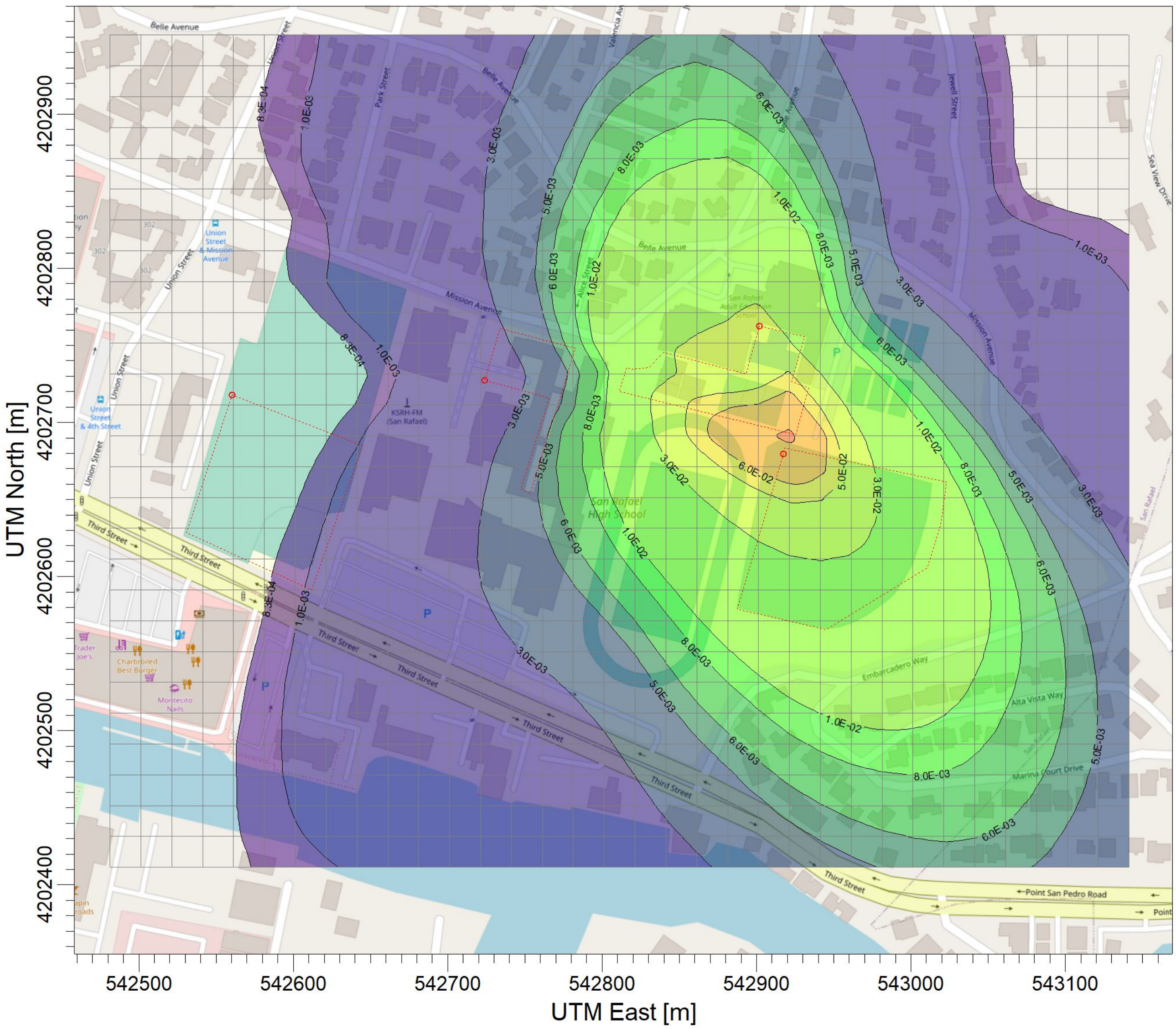
9.2E-04 1.0E-03 2.0E-03 4.0E-03 5.0E-03 7.0E-03 9.0E-03 1.0E-02 2.0E-02 4.0E-02 5.0E-02 7.0E-02 9.0E-02 9.2E-02

| COMMENTS: | SOURCES: **4** | COMPANY NAME: Baseline Env **Baseline Environmental Consulting** | |
|---|---|---|---|
| | RECEPTORS: **952** | | |
| | OUTPUT TYPE: **Concentration** | SCALE: 1:4,468 0 — 0.1 km | |
| | MAX: **9.2E-02 ug/m^3** | | PROJECT NO.:23219-00 |

AERMOD View - Lakes Environmental Software

PROJECT TITLE: San Rafael High School Supplemental EIR

**San Rafael High School Supplemental EIR**
**Construction exhaust_Aquatics Center**




PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: AQUATICS — ug/m^3

Max: 8.3E-02 [ug/m^3] at (542921.25, 4202691.50)

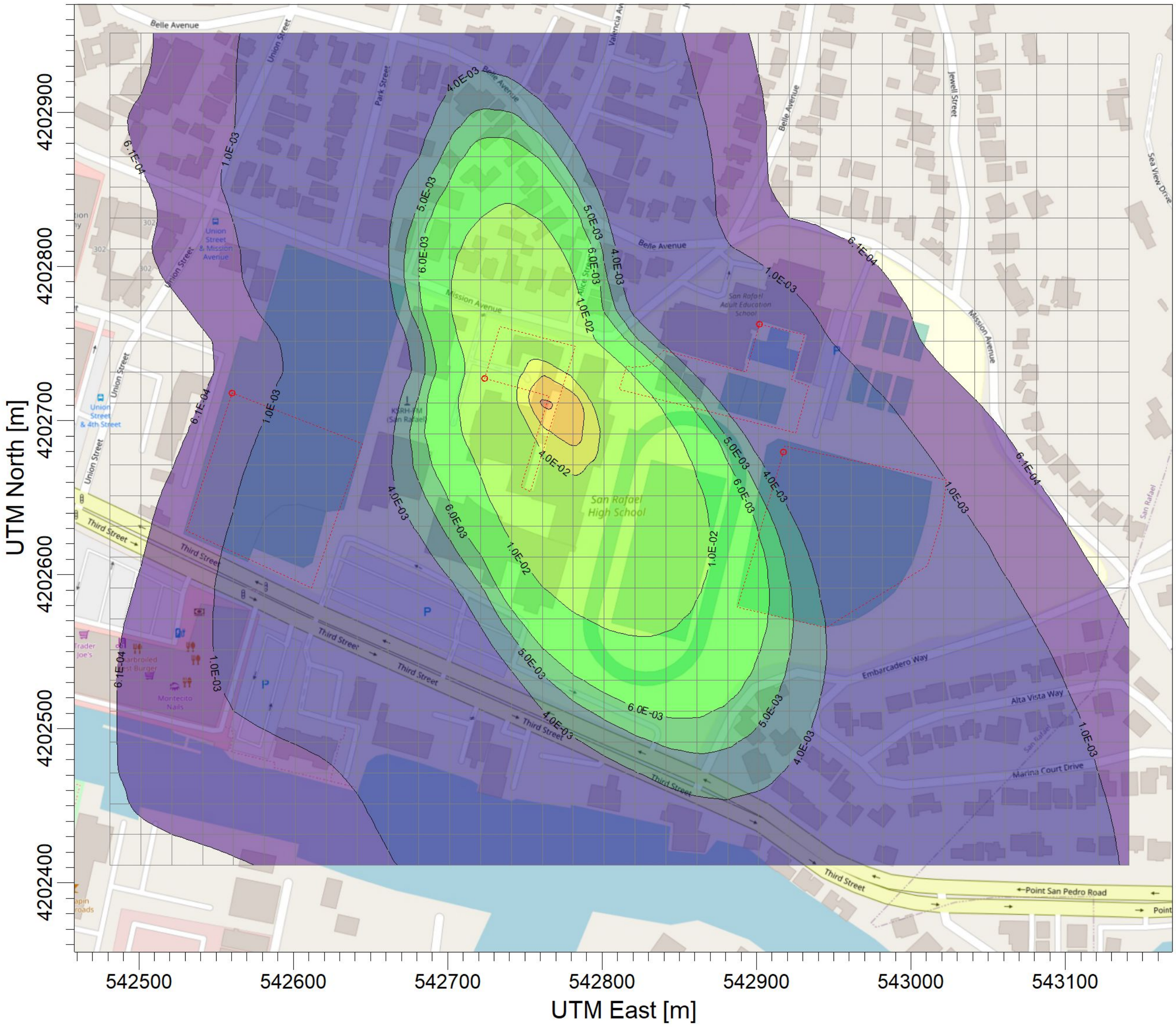
8.3E-04 | 1.0E-03 | 3.0E-03 | 5.0E-03 | 6.0E-03 | 8.0E-03 | 1.0E-02 | 3.0E-02 | 5.0E-02 | 6.0E-02 | 8.0E-02 | 8.3E-02

| | | |
|---|---|---|
| COMMENTS: | SOURCES:<br>**4** | COMPANY NAME: Baseline Env<br>**Baseline Environmental Consulting** |
| | RECEPTORS:<br>**952** | |
| | OUTPUT TYPE:<br>**Concentration** | SCALE: 1:4,468<br>0 — 0.1 km |
| | MAX:<br>**8.3E-02 ug/m^3** | PROJECT NO.:23219-00 |

AERMOD View - Lakes Environmental Software

PROJECT TITLE: San Rafael High School Supplemental EIR

**San Rafael High School Supplemental EIR**
**Construction exhaust_VAPA**




PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: ARTBUILD ug/m^3

Max: 6.2E-02 [ug/m^3] at (542761.25, 4202711.50)

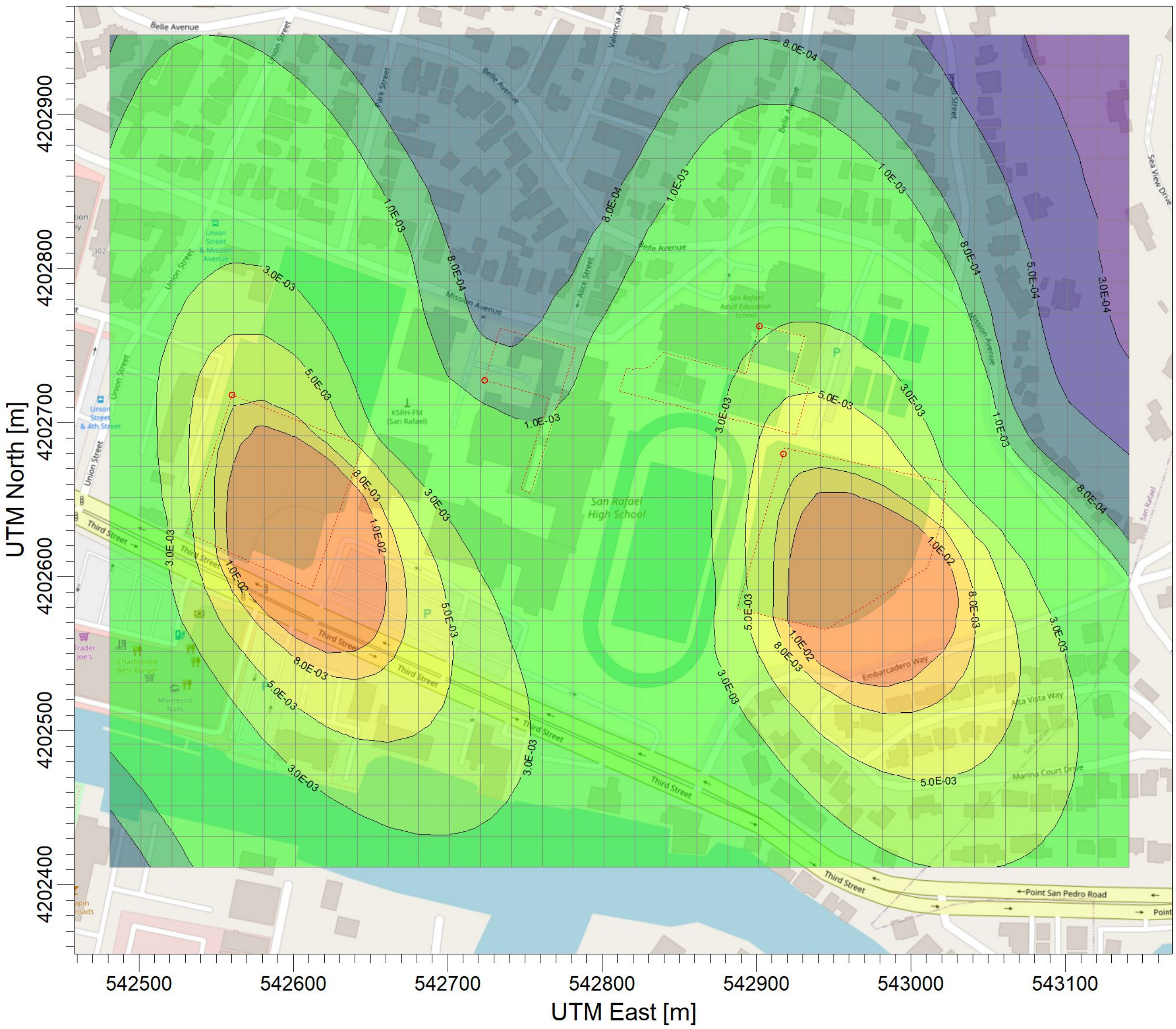
6.1E-04 1.0E-03 4.0E-03 5.0E-03 6.0E-03 1.0E-02 4.0E-02 5.0E-02 6.0E-02 6.2E-02

| | | | |
|---|---|---|---|
| COMMENTS: | SOURCES: **4** | COMPANY NAME: Baseline Env **Baseline Environmental Consulting** | |
| | RECEPTORS: **952** | | |
| | OUTPUT TYPE: **Concentration** | SCALE: 1:4,468 0 0.1 km | |
| | MAX: **6.2E-02 ug/m^3** | | PROJECT NO.:23219-00 |

AERMOD View - Lakes Environmental Software

PROJECT TITLE: San Rafael High School Supplemental EIR

**San Rafael High School Supplemental EIR**
**Construction exhaust_Turf**




PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: FIELD

ug/m^3

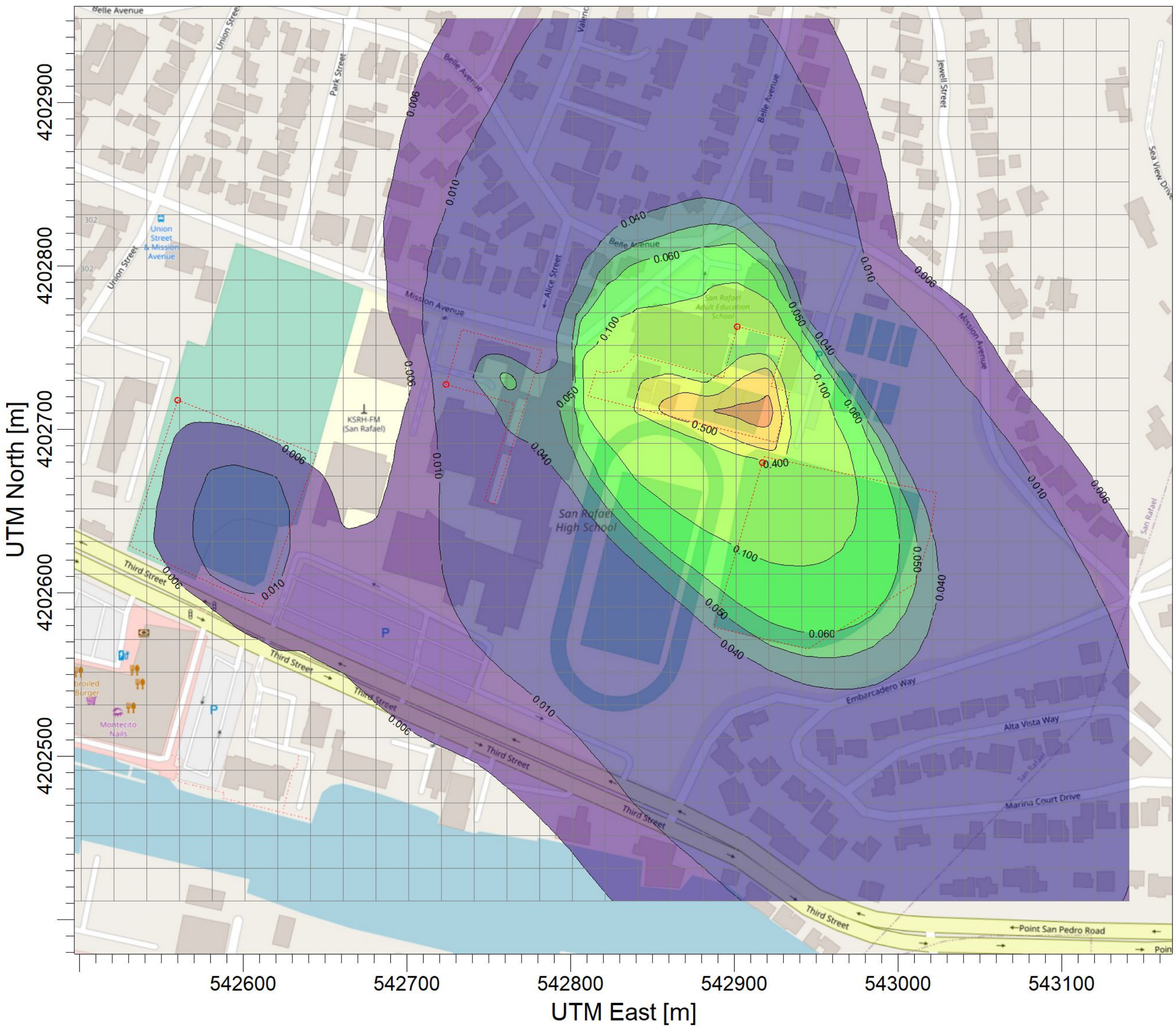
Max: 1.8E-02 [ug/m^3] at (542601.25, 4202611.50)

1.8E-04 3.0E-04 5.0E-04 8.0E-04 1.0E-03 3.0E-03 5.0E-03 8.0E-03 1.0E-02 1.8E-02

| | | | |
|---|---|---|---|
| COMMENTS: | SOURCES: **4** | COMPANY NAME: Baseline Env **Baseline Environmental Consulting** | |
| | RECEPTORS: **952** | | |
| | OUTPUT TYPE: **Concentration** | SCALE: 1:4,468 0 0.1 km | |
| | MAX: **1.8E-02 ug/m^3** | | PROJECT NO.:23219-00 |

PROJECT TITLE: San Rafael High School Supplemental EIR

**San Rafael High School Supplemental EIR**
**Construction Dust PM2.5_all**




PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: ALL

ug/m^3

Max: 0.642 [ug/m^3] at (542921.25, 4202711.50)

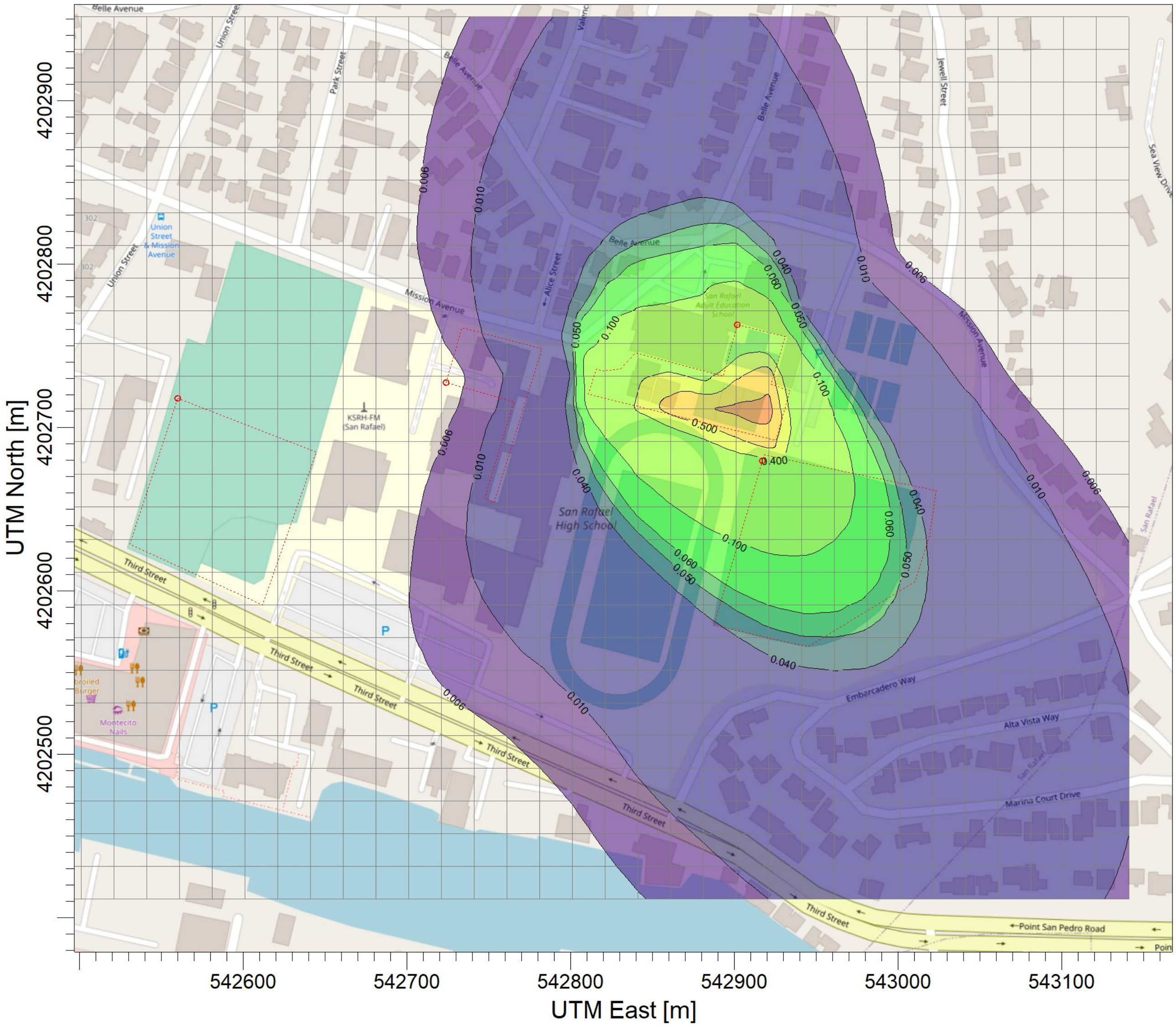
0.006 0.010 0.040 0.050 0.060 0.100 0.400 0.500 0.600 0.642

| COMMENTS: | SOURCES: | COMPANY NAME: Baseline Env | |
|---|---|---|---|
| | **4** | **Baseline Environmental Consulting** | |
| | RECEPTORS: **952** | | |
| | OUTPUT TYPE: **Concentration** | SCALE: 1:4,214 0 0.1 km | |
| | MAX: **0.642 ug/m^3** | | PROJECT NO.:23219-00 |

AERMOD View - Lakes Environmental Software

PROJECT TITLE: San Rafael High School Supplemental EIR

**San Rafael High School Supplemental EIR**
**Construction Dust PM2.5_Aquatics Center**




PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: AQUATICS ug/m^3

Max: 0.640 [ug/m^3] at (542921.25, 4202711.50)

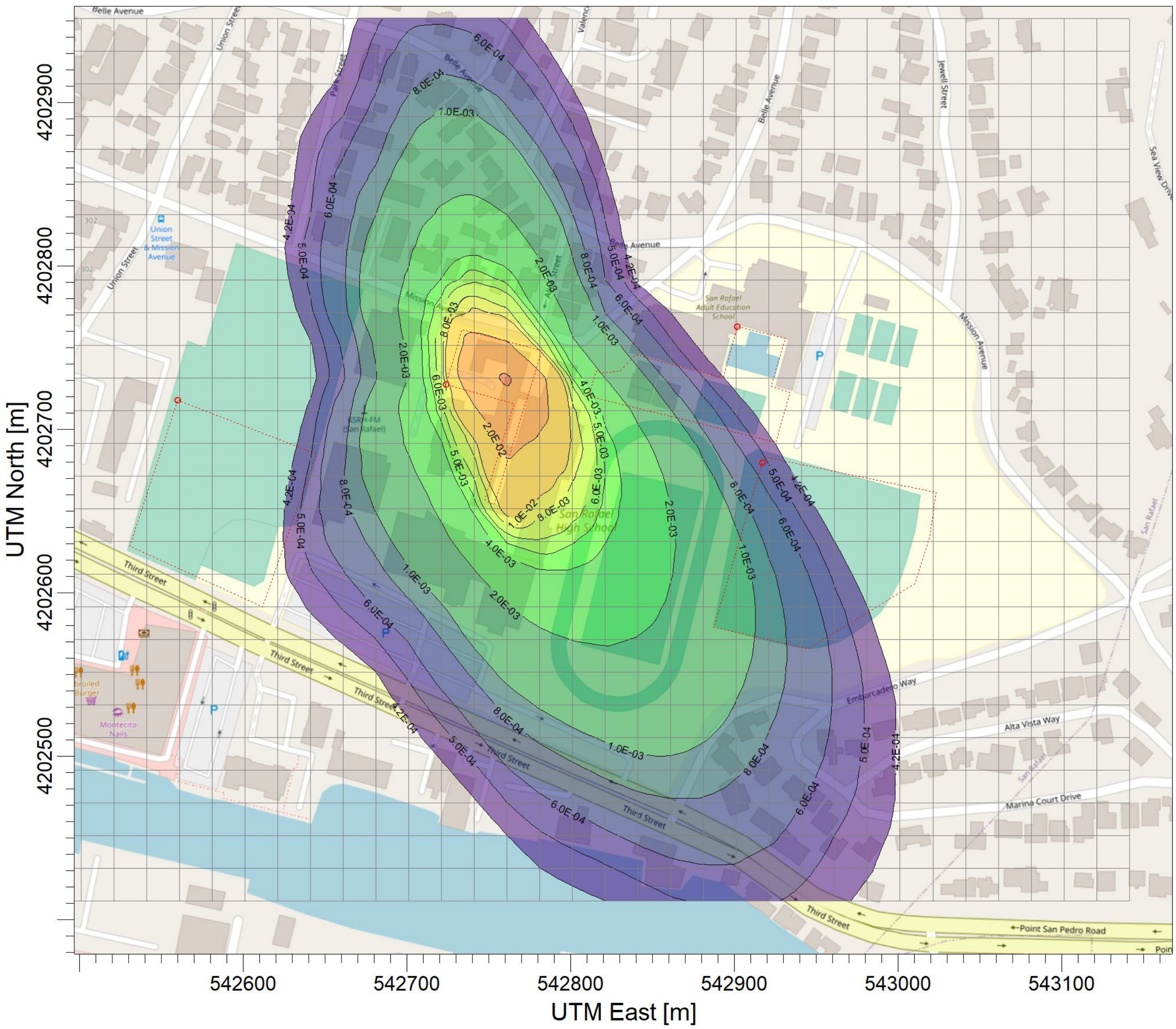
0.006 0.010 0.040 0.050 0.060 0.100 0.400 0.500 0.600 0.640

| COMMENTS: | SOURCES: **4** | COMPANY NAME: Baseline Env **Baseline Environmental Consulting** | |
|---|---|---|---|
| | RECEPTORS: **952** | | |
| | OUTPUT TYPE: **Concentration** | SCALE: 1:4,214 0 0.1 km | |
| | MAX: **0.640 ug/m^3** | | PROJECT NO.:23219-00 |

AERMOD View - Lakes Environmental Software

PROJECT TITLE: San Rafael High School Supplemental EIR

**San Rafael High School Supplemental EIR**
**Construction Dust PM2.5_VAPA**




PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: ARTBUILD

ug/m^3

Max: 4.2E-02 [ug/m^3] at (542761.25, 4202731.50)

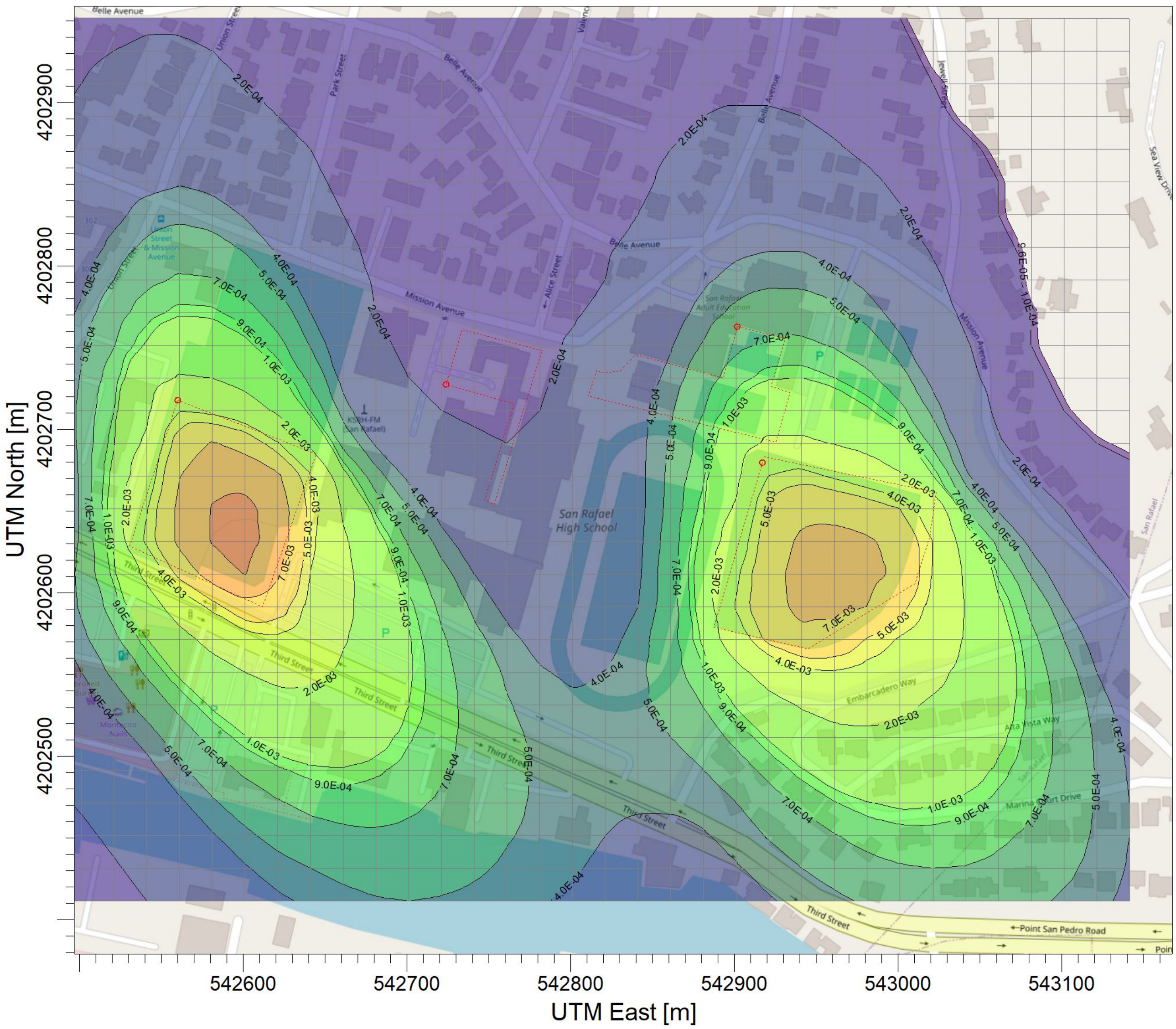
4.2E-04 5.0E-04 6.0E-04 8.0E-04 1.0E-03 2.0E-03 4.0E-03 5.0E-03 6.0E-03 8.0E-03 1.0E-02 2.0E-02 4.0E-02 4.2E-02

| | | | |
|---|---|---|---|
| COMMENTS: | SOURCES:<br>**4** | COMPANY NAME: Baseline Env<br>**Baseline Environmental Consulting** | |
| | RECEPTORS:<br>**952** | | |
| | OUTPUT TYPE:<br>**Concentration** | SCALE: 1:4,213<br>0 0.1 km | |
| | MAX:<br>**4.2E-02 ug/m^3** | | PROJECT NO.:23219-00 |

AERMOD View - Lakes Environmental Software

PROJECT TITLE: San Rafael High School Supplemental EIR

**San Rafael High School Supplemental EIR**
**Construction Dust PM2.5_Turf**




PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: FIELD

ug/m^3

Max: 9.6E-03 [ug/m^3] at (542601.25, 4202631.50)

9.6E-05 1.0E-04 2.0E-04 4.0E-04 5.0E-04 7.0E-04 9.0E-04 1.0E-03 2.0E-03 4.0E-03 5.0E-03 7.0E-03 9.0E-03 9.6E-03

| | | |
|---|---|---|
| COMMENTS: | SOURCES: **4** | COMPANY NAME: Baseline Env **Baseline Environmental Consulting** |
| | RECEPTORS: **952** | |
| | OUTPUT TYPE: **Concentration** | SCALE: 1:4,213 0 — 0.1 km |
| | MAX: **9.6E-03 ug/m^3** | PROJECT NO.:23219-00 |

AERMOD View - Lakes Environmental Software

| Summary of Health Risk Assessment at the Maximally Exposed Individual Resident | | | | | |
|---|---|---|---|---|---|
| **Health Risk Assessment Parameters and Results** | | | | | |
| | | **0-2 Years Old Infant** | | | |
| **Inhalation Cancer Risk Assessment for DPM** | **Units** | **Aquatic Center** | **Arts Building and Performing Arts Plaza** | **Athletic Fields Turf** | **Notes** |
| DPM Concentration (C) | μg/m$^3$ | 0.004 | 0.020 | 0.001 | ISCST3 Annual Average |
| Daily Breathing Rate (DBR) | L/kg-day | 1090 | 1090 | 1090 | 95th percentile under age of 2 (OEHHA, 2015) |
| Inhalation absorption factor (A) | unitless | 1.0 | 1.0 | 1.0 | OEHHA, 2015 |
| Exposure Frequency (EF) | unitless | 0.96 | 0.96 | 0.96 | 350 days/365 days in a year (OEHHA, 2015) |
| Dose Conversion Factor ($CF_D$) | mg-m$^3$/μg-L | 0.000001 | 0.000001 | 0.000001 | Conversion of μg to mg and L to m$^3$ |
| Dose (D) | mg/kg/day | 0.000004 | 0.000021 | 0.000001 | C*DBR*A*EF*$CF_D$ (OEHHA, 2015) |
| Cancer Potency Factor (CPF) | (mg/kg/day)$^{-1}$ | 1.1 | 1.1 | 1.1 | OEHHA, 2015 |
| Age Sensitivity Factor (ASF) | unitless | 10 | 10 | 10 | OEHHA, 2015 |
| Annual Exposure Duration (ED) | years | 1.33 | 1.50 | 0.50 | Based on total construction period of 16 months, 18 months, and 6 months, respectively |
| Averaging Time (AT) | years | 70 | 70 | 70 | 70 years for residents (OEHHA, 2015) |
| Fraction of time at home (FAH) | unitless | 0.85 | 0.85 | 0.85 | OEHHA, 2015 |
| Cancer Risk Conversion Factor (CF) | m$^3$/L | 1000000 | 1000000 | 1000000 | Chances per million (OEHHA, 2015) |
| Cancer Risk | per million | 0.7 | 4.3 | 0.1 | D*CPF*ASF*ED/AT*FAH*CF (OEHHA, 2015) |
| Total Cancer Risk | per million | 5.04 | | | at MEIR location |
| **Hazard Index for DPM** | **Units** | **Value** | | | **Notes** |
| Chronic REL | μg/m$^3$ | 5.0 | 5.0 | 5.0 | OEHHA, 2015 |
| Chronic Hazard Index for DPM | unitless | 0.0008 | 0.0041 | 0.0001 | At MEIR location |
| Total Chronic Hazard Index for DPM | unitless | 0.0050 | | | At MEIR location |

Notes:

DPM = diesel particulate matter

REL = reference exposure level

μg/m$^3$ = micrograms per cubic meter

L/kg-day = liters per kilogram-day

m$^3$/L = cubic meters per liter

(mg/kg/day)$^{-1}$ = 1/milligrams per kilograms per day

Office of Environmental Health Hazard Assessment (OEHHA), 2015. *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. February.*

| Summary of Health Risk Assessment at the Maximally Exposed Individual Student | | | | | |
|---|---|---|---|---|---|
| **Health Risk Assessment Parameters and Results** | | | | | |
| **Inhalation Cancer Risk Assessment for DPM** | **Units** | **2-16 Years Old Student** | | | **Notes** |
| | | **Aquatic Center** | **Arts Building and Performing Arts Plaza** | **Athletic Fields Turf** | |
| DPM Concentration (C) | μg/m$^3$ | 0.006 | 0.057 | 0.001 | ISCST3 Annual Average |
| Daily Breathing Rate (DBR) | L/kg-8 hrs | 520 | 520 | 520 | BAAQMD, 2023 |
| Inhalation absorption factor (A) | unitless | 1.0 | 1.0 | 1.0 | OEHHA, 2015 |
| Exposure Frequency (EF) | unitless | 0.68 | 0.68 | 0.68 | Conservatively assumed 250 days at school/365 days in a year |
| Dose Conversion Factor ($CF_D$) | mg-m$^3$/μg-L | 0.000001 | 0.000001 | 0.000001 | Conversion of μg to mg and L to m$^3$ |
| Dose (D) | mg/kg/day | 0.000002 | 0.000020 | 0.000000 | C*DBR*A*EF*$CF_D$ (OEHHA, 2015) |
| Cancer Potency Factor (CPF) | (mg/kg/day)$^{-1}$ | 1.1 | 1.1 | 1.1 | OEHHA, 2015 |
| Age Sensitivity Factor (ASF) | unitless | 3 | 3 | 3 | OEHHA, 2015 |
| Annual Exposure Duration (ED) | years | 1.33 | 1.50 | 0.50 | Based on total construction period of 16 months, 18 months, and 6 months, respectively |
| Averaging Time (AT) | years | 70 | 70 | 70 | 70 years averaging time for lifetime cancer risk (OEHHA, 2015) |
| Worker Adjustment Factor (WAF) | unitless | 3.17 | 3.17 | 3.17 | OEHHA, 2015 |
| Cancer Risk Conversion Factor (CF) | m$^3$/L | 1000000 | 1000000 | 1000000 | Chances per million (OEHHA, 2015) |
| Cancer Risk | per million | 0.4 | 4.6 | 0.0 | D*CPF*ASF*ED/AT*FAH*CF (OEHHA, 2015) |
| Total Cancer Risk | per million | 5.01 | | | at MEIS location |
| **Hazard Index for DPM** | **Units** | **Value** | | | **Notes** |
| Chronic REL | μg/m$^3$ | 5.0 | 5.0 | 5.0 | OEHHA, 2015 |
| Chronic Hazard Index for DPM | unitless | 0.0012 | 0.0115 | 0.0002 | At MEIS location |
| Total Chronic Hazard Index for DPM | unitless | 0.013 | | | At MEIS location |

Notes:

DPM = diesel particulate matter

REL = reference exposure level

μg/m$^3$ = micrograms per cubic meter

L/kg-day = liters per kilogram-day

m$^3$/L = cubic meters per liter

(mg/kg/day)$^{-1}$ = 1/milligrams per kilograms per day

Bay Area Air Quality Management District (BAAQMD), 2023. California Environmental Quality Act Air Quality Guidelines, April.

Office of Environmental Health Hazard Assessment (OEHHA), 2015. *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. February.*

| Summary of Health Risk Assessment at the Maximally Exposed Individual Offsite Worker | | | | | |
|---|---|---|---|---|---|
| **Health Risk Assessment Parameters and Results** | | | | | |
| | | **16-70 Year Adult** | | | |
| **Inhalation Cancer Risk Assessment for DPM** | **Units** | **Aquatic Center** | **Arts Building and Performing Arts Plaza** | **Athletic Fields Turf** | **Notes** |
| DPM Concentration (C) | $\mu g/m^3$ | 0.001 | 0.002 | 0.008 | ISCST3 Annual Average |
| Daily Breathing Rate (DBR) | L/kg-day | 230 | 230 | 230 | BAAQMD, 2023 |
| Inhalation absorption factor (A) | unitless | 1.0 | 1.0 | 1.0 | OEHHA, 2015 |
| Exposure Frequency (EF) | unitless | 0.68 | 0.68 | 0.68 | 250 days/365 days in a year (OEHHA, 2015) |
| Dose Conversion Factor ($CF_D$) | $mg\text{-}m^3/\mu g\text{-}L$ | 0.000001 | 0.000001 | 0.000001 | Conversion of μg to mg and L to $m^3$ |
| Dose (D) | mg/kg/day | 0.000000 | 0.000000 | 0.000001 | C*DBR*A*EF*$CF_D$ (OEHHA, 2015) |
| Cancer Potency Factor (CPF) | $(mg/kg/day)^{-1}$ | 1.1 | 1.1 | 1.1 | OEHHA, 2015 |
| Age Sensitivity Factor (ASF) | unitless | 1 | 1 | 1 | OEHHA, 2015 |
| Annual Exposure Duration (ED) | years | 1.33 | 1.50 | 0.50 | Based on total construction period of 16 months, 18 months, and 6 months, respectively |
| Averaging Time (AT) | years | 70 | 70 | 70 | 70 years averaging time for lifetime cancer risk (OEHHA, 2015) |
| Worker Adjustment Factor (WAF) | unitless | 3.17 | 3.17 | 3.17 | OEHHA, 2015 |
| Cancer Risk Conversion Factor (CF) | $m^3/L$ | 1000000 | 1000000 | 1000000 | Chances per million (OEHHA, 2015) |
| Cancer Risk | per million | 0.01 | 0.02 | 0.03 | D*CPF*ASF*ED/AT*FAH*CF (OEHHA, 2015) |
| Total Cancer Risk | per million | | 0.1 | | at MEIW location |
| **Hazard Index for DPM** | **Units** | **Value** | | | **Notes** |
| Chronic REL | $\mu g/m^3$ | 5.0 | 5.0 | 5.0 | OEHHA, 2015 |
| Chronic Hazard Index for DPM | unitless | 0.0003 | 0.0003 | 0.0016 | At MEIW location |
| Total Chronic Hazard Index for DPM | unitless | | 0.0021 | | At MEIW location |

Notes:

DPM = diesel particulate matter

REL = reference exposure level

$\mu g/m^3$ = micrograms per cubic meter

L/kg-day = liters per kilogram-day

$m^3/L$ = cubic meters per liter

$(mg/kg/day)^{-1}$ = 1/milligrams per kilograms per day

Bay Area Air Quality Management District (BAAQMD), 2023. California Environmental Quality Act Air Quality Guidelines, April.

Office of Environmental Health Hazard Assessment (OEHHA), 2015. *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. February.*

# APPENDIX E
# CULTURAL BACKGROUND INFORMATION

# Appendix C

## Department of Parks and Recreation 523 Forms

## San Antonio Shopping Center (North)

**Kara Brunzell, Architectural Historian, Horizon Water and Environment**

**July 26, 2022**

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
**PRIMARY RECORD**

Primary # ________________
HRI # ________________
Trinomial ________________
NRHP Status Code ________
Other Listings ________________
Review Code ________ Reviewer ________________ Date ________

 ***Resource Name or #** (Assigned by recorder) San Antonio Shopping Center (north)

**P1. Other Identifier:** San Antonio Shopping Center (north)

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County** Santa Clara

**and** (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad_Date T__; R ___; ___ ¼ of Sec ___; ______ B.M.**

c. Address 2550 W El Camino Real **City** Mountain View **Zip** 94040

**d. UTM:** (give more than one for large and/or linear resources) Zone __; _______mE/ _______mN

**e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)** 148-21-007

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The 11.695-acre property is the northern end of the San Antonio Shopping Center, located in a commercial neighborhood of Mountain View. It holds three large historic-era commercial buildings surrounded by expansive parking areas and is bounded on the west, north, and east by Pacchetti Way, California Street, and Showers Drive; an interior road just south of the three buildings separates the property from the southern portion of the San Antonio Shopping Center. There is a small non-historic-era commercial building at the corner of California Street and Showers Drive.

Purity Store/Community Vaccination (435 San Antonio Road): The 16,213 square foot one-story commercial building has a rectangular plan and an unusual roof form with a groined vault at the center surrounded by a lower-height flat roof. Slightly upturned wide overhanging eaves shelter the north end of the building; other elevations have no eaves. The building is clad in stucco siding divided into bays by plain rectangular pilasters. Bays on the north façade are filled by large arched windows with aluminum mullions. Arches are repeated on secondary elevation bays, although most are blank rather than glazed. The entrance on the originally blank east façade is recessed within an arched bay and fitted with fully glazed aluminum doors with a transom and sidelights. The bay to its left has been fitted with glazing and aluminum mullions (cont. p. 3).

***P3b. Resource Attributes:** (List attributes and codes) HP6, 1-3 story commercial property

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #) Photograph 1: San Antonio Center, camera facing southeast, July 26, 2022.

***P6. Date Constructed/Age and Sources:** ☒ Historic ☐ Prehistoric ☐ Both
1959/1974, Santa Clara County Assessor

***P7. Owner and Address:**
Los Altos School District

***P8. Recorded by:** (Name, affiliation, address)
Kara Brunzell
Horizon Water & Environment
266 Grand Ave #210,
Oakland, CA 94610

***P9. Date Recorded:** July 26, 2022

***P10. Survey Type:** (Describe) Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") None

***Attachments:** NONE ☒ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (list) ________

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
**BUILDING, STRUCTURE, AND OBJECT RECORD**

Primary # ____________
HRI # ____________



***NRHP Status Code** 6Z

***Resource Name or # (Assigned by recorder)** San Antonio Shopping Center (north)

**B1. Historic Name:** San Antonio Shopping Center

**B2. Common Name:** San Antonio Shopping Center

**B3. Original Use:** commercial B4. Present Use: commercial

***B5. Architectural Style:**

***B6. Construction History:** (Construction date, alteration, and date of alterations)

San Antonio Shopping Center, original construction (current Safeway building), 1954
Sears Store original construction, 1957, demolished 2010
Purity Store (435 San Antonio Road) original construction, 1959, entrance volume with cornice added late 1990s
Mervyn's (350 Showers Drive) original construction, 1974
Best Products (2535 California Street) original construction, 1974, extensively remodeled c2000
510/520 Showers Drive (south end of Mervyn's) original construction, c1974, extensively remodeled c2000

***B7. Moved?** ☒ **No** ☐ **Yes** ☐ **Unknown** **Date:** ____________ **Original Location:** ____________

***B8. Related Features:** ____________

B9. Architect: John S. Bolles. b. Builder: multiple

***B10. Significance: Theme** n/a **Area** n/a

**Period of Significance** n/a **Property Type** n/a **Applicable Criteria** n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

**B11. Additional Resource Attributes:** (List attributes and codes)

***B12. References:**

(See Footnotes)

B13. Remarks:

***B14. Evaluator:** Kara Brunzell

***Date of Evaluation:** July 26, 2022

(This space reserved for official comments.)

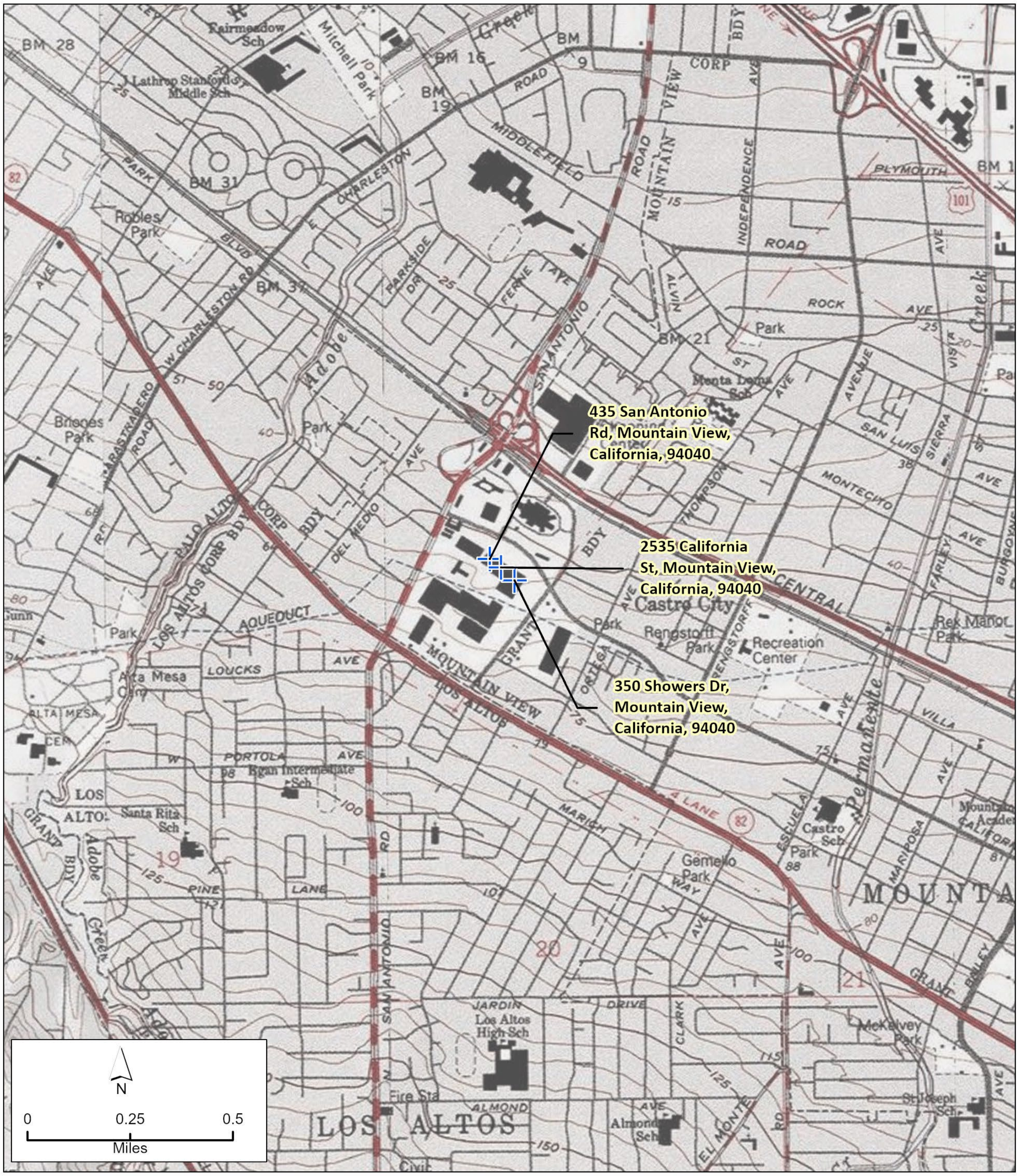
***P3a. Description: (continued):**

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
# LOCATION MAP

Primary #
HRI#
Trinomial

**Page** 3 **of** 20 ***Resource Name or #** (Assigned by recorder) San Antonio Shopping Center (north)

***Map Name:** Mountain View, CA ***Scale:** 1:24,000 ***Date of map:** 1997



Purity Store (cont.)

A slightly projecting contemporary parapet with ornamental cornice was added to the building over these two center bays when the main entrance was moved from the north façade to the east. The building is in fair condition and shows some signs of deterioration.

Photograph 2: 435 San Antonio Road, east elevation, camera facing southwest, July 26, 2022.

Photograph 3: 435 San Antonio Road, east and north elevations, camera facing southwest, July 26, 2022.

Photograph 4: 435 San Antonio Road, north and west elevations, camera facing southeast, July 26, 2022.

Photograph 5: 435 San Antonio Road, south and east elevations, camera facing north, July 26, 2022.

Mervyn's/ Kohl's (350 Showers Drive): The 65,100 one-story commercial building has a rectangular plan and a flat roof. The building is constructed of rough-faced concrete masonry units with intermittent decorative sections of projecting smooth units laid in geometric patterns. A slightly projecting rectangular soffit at the roofline features a decorative motif of narrow vertical strips of wood. The entrances are sheltered by taller and heavier soffits with the same decorative treatment that project above the cornice and support backlit business signs. The entrances, centered on the north and east facades, are fitted with fully glazed aluminum commercial doors with horizontal glass transoms. The entrance on the south elevation is to the right of a large divided-light window. It is recessed behind vacant small retail stores in projecting volumes at both corners. These smaller stores are attached to the main building but have been remodeled with stucco cladding, variable -height roofs, stepped back cornices, and corner towers with hipped roofs.

Photograph 6: 350 Showers Drive, east elevation, camera facing northwest, July 26, 2022.

**Page 7 of 20** ***Resource Name or # (Assigned by recorder)** 2550 W El Camino Real
***Recorded by** Kara Brunzell ***Date:** July 26, 2022 ☒ Continuation ☐ Update

Photograph 7: 350 Showers Drive, north elevation, camera facing west, July 26, 2022.


Photograph 8: 350 and 510 Showers Drive, south and east elevations, camera facing northeast, July 26, 2022.

***Resource Name or # (Assigned by recorder)** 2550 W El Camino Real

***Recorded by** Kara Brunzell ***Date:** July 26, 2022 ☒ Continuation ☐ Update


Photograph 9: 350 Showers Drive, south elevation, camera facing northeast, July 26, 2022.

Best Products/24 Hour Fitness (2535 California Street): The 44,043 square foot one-story commercial building has a square plan and a flat roof with a minimal parapet and plain cornice. The building is clad in stucco siding with rough-faced concrete masonry units at lower walls and as accents. Decorative geometric metal grates are affixed to the façade. The backlit business sign is centered on the main (east) façade, which has slightly projecting lower-height entry volumes at either end. The projecting volumes shelter entrances set at a 45-degree angle, each of which is fitted to sets of double doors with fully glazed aluminum doors with transoms and sidelights. Heavy flat metal awnings project from the building at these entrances. Side elevations face adjacent buildings and lack fenestration or entrances. The rear (west) elevation features taller projecting volumes at either end; the south volume shelters a secondary entrance while the north volume is purely decorative. The building is in good condition.

 ***Resource Name or # (Assigned by recorder)** 2550 W El Camino Real

***Recorded by** Kara Brunzell ***Date:** July 26, 2022 ☒ Continuation ☐ Update


Photograph 10: 2535 California Street, east elevation, camera facing southeast, July 26, 2022.

Photograph 11: 350 Showers Drive north elevation and 2535 California south east elevation, camera facing southwest, July 26, 2022.


Photograph 12: 2535 California Street, west elevation, camera facing northeast, July 26, 2022.

**B10. Significance (continued):**

Mountain View

When Spanish explorers and missionaries first arrived in the Mountain View area in the mid-18th century, the area was inhabited by the Puichon Ohlone people. Missionaries founded the nearby Mission Santa Clara in 1777, forcibly relocating the Ohlone. In 1842, the recently formed Mexican government granted the 8,800-acre Rancho Pastoría de las Borregas, which included the Sunnyvale and Mountain View Areas, to Francisco Estrada, who soon died and passed it to Mariano Castro. In 1848, California was acquired by the United States, and Gold Rush settlers soon began to arrive.[1]

The town of Mountain View began in 1852 as a stagecoach stop along El Camino Real, which quickly grew into a village. The Mountain View School District was formed in 1854 and the first public school opened in 1857. Shipping investors began building docks to ship produce and grain across the San Francisco Bay in the 1860s. In 1864 the San Francisco and San Jose Railroad was completed on the Rancho Pastoría de las Borregas, a half-mile north of the existing village, and a new community sprang up around the railroad stop. The Castro family was given its own depot and Crisanto Castro laid out a "New Mountain View" around the railroad (Mountain View and New Mountain View remained distinct communities until the mid-20th century). Large waves of immigrants from China, Italy, Portugal, and Japan, among other countries, settled in the area, working in farming and the canning industry; Mountain View would remain a notably diverse city for decades. In 1902, the City of Mountain View incorporated. The next year, the Seventh-Day Adventist Pacific Press moved its headquarters to Mountain View, bringing with it dozens of families that settled and reshaped the western edge of the town. In 1906 the nearby San Francisco earthquake destroyed many buildings in Mountain View and caused significant damage, but no known deaths.[2]

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[1] "A Look Back: Timeline of Mountain View History," *Mercury News* (San Jose), 24 February 2007; Nicholas Perry, *Images of America: Mountain View* (Charleston: Arcadia Publishing, 2006), 7.

[2] Nicholas Perry, *Images of America: Mountain View* (Charleston: Arcadia Publishing, 2006), 7; "A Look Back: Timeline of Mountain View History," *Mercury News* (San Jose), 24 February 2007.

In 1933, the Moffett Field Naval Air Station opened at the border of Sunnyvale and Mountain View to serve as a base for dirigibles. The NASA (called NACA at the time) Ames Research Center opened in 1939. These two facilities provided hundreds of jobs and began to shift the economy away from agriculture by bringing in scientists and technology researchers. After World War II, a wave of returning veterans settled there and spurred the growth of suburbs. Bayshore Highway/Highway 101 was completed in 1937 (it was converted to a freeway by 1967). Developer R. D. Northcutt began construction of the San Antonio Shopping Center in 1953, initiating the transformation of the rural San Antonio District from an agricultural area to a commercial and residential neighborhood. In 1956, William Shockley established the Shockley Semiconductor Laboratory in an apricot storage barn on San Antonio Road near the shopping center; as the first silicon-device research facility, this would come to profoundly change Mountain View and the surrounding area. Subdivisions had already begun construction prior to establishment of the shopping center and semiconductor laboratory, but during their first stages of development both were surrounded by orchards and open fields. The San Antonio District was among the unincorporated areas on the edges of Mountain View that were annexed in the postwar period as their orchards were replaced with shopping centers, residential subdivisions, and apartment buildings. [3]

Population continued to grow in the 1950s and 60s (from 6,563 in 1950 to 54,131 in 1970), as Mountain View developed from an agricultural area to a suburb. Several more technology companies were founded nearby in the 1960s as computing technology progressed, and the area was dubbed Silicon Valley in 1971. By the 1980s, Silicon Valley was the heart of the computer industry, and tech campuses replaced the last farms in Mountain View. Downtown Mountain View and other older neighborhoods were redeveloped in the 1990s, with town houses and other high-density housing replacing the single-family residences of the immediate postwar era to accommodate continuing population growth. Shopping malls and strip malls were also repurposed or demolished and replaced during this era. The Moffett Naval Air Station closed in 1991, and Google moved to Mountain View in 1999, bookending the decade with the end of the defense industry and the increasing dominance of the technology industry.[4]

Shopping Malls

The American shopping mall was invented by architect Victor Gruen (1903-1980), who fled Nazi takeover of Austria to New York City in 1938. In New York, he began a highly successful career as a store designer and was soon designing storefronts around the country. Observing the isolated, car-centric lifestyle of American suburbs, Gruen became convinced that they needed a public community gathering space that facilitated strolling rather than driving. He began to design mixed-use buildings oriented around indoor plazas and including not only shops but housing, offices, medical centers, libraries, childcare, and bomb shelters. In 1952, the Dayton Company commissioned him to build the first indoor shopping mall: the Southdale Center in Edina, Minnesota, which opened in 1956. The Southdale Center's most distinctive feature was a center court with a skylight, which came to be a defining aspect of mall architecture as later malls drew on Southdale Center as a template. The mall was a hit, and mall construction boomed in ensuing decades, although few components of Gruen's original idea made it into the shopping centers. Until around the 1990s, malls were often the only air-conditioned place many Americans had access to, enhancing their appeal as a place for leisure. By 2005, at least 1,500 malls had been constructed in the US.[5]

The shopping mall boom peaked in 1990 and rates of construction of conventional malls began to decline as Lifestyle Centers, outdoor malls with stores accessed by pedestrian streets, took over. No new indoor malls were constructed in 2007 for the first time since their introduction, and an era of decline for the American shopping mall began. By the 2010s, malls were closing in waves. By 2015 there were more than one hundred abandoned and crumbling shopping malls in the US, and the US was no longer the leader of mall culture, with the largest malls in the world found in countries such as China, Iran, and India.[6]

Outdoor malls, or strip malls, originated from open-air markets that date back to the 7th century. However, the rise of modern strip malls started in the 1920s. With the increase of automobile ownership following World War II, car-friendly strip malls grew in popularity. Strip malls were smaller than indoor malls and more efficient to construct, and so remained popular after the introduction of the indoor mall.

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[3] Nicholas Perry, *Images of America: Mountain View* (Charleston: Arcadia Publishing, 2006), 7-8. 17-20.

[4] "A Look Back: Timeline of Mountain View History," *Mercury News* (San Jose), 24 February 2007.

[5] "Episode 163: The Gruen Effect," 99% Invisible, May 5, 2015, accessed July 13, 2022, https://99percentinvisible.org/episode/the-gruen-effect/; Hannes Richter, "Victor Gruen: Architect of an American Icon," Austrian Embassy: Washington, accessed July 14, 2022, https://www.austria.org/victor-gruen#:~:text=Victor%20Gruen%20passed%20away%20in%20Vienna%20on%20February%2014%2C%201980.

[6] "Episode 163: The Gruen Effect," 99% Invisible, May 5, 2015, accessed July 13, 2022, https://99percentinvisible.org/episode/the-gruen-effect/; Nelson D. Schwartz, "The Economics (and Nostalgia) of Dead Malls," *New York Times*, January 3, 2015; Jonathan Glancey, "The Death of the US Shopping Mall," *BBC*, October 21, 2014.

With the rise of highway construction, strip malls spread across the United States. By the 1970s, strip malls were an essential part of American communities. They supported family shopping trips, and their parking lots were the location of various community events.[7]

In the 1990s, underused strip malls were transformed into soup kitchens and low-income housing. Strip malls did not go out of business at the same rate as indoor malls since retail spaces were individual businesses that did not rely on the success of other tenants. However, because of the tendency for strip malls to be located along highways and major thoroughfares, they discourage non-automobile users in today's more eco-conscious society.[8]

San Antonio Shopping Center

In 1953, R. D. Northcutt, who saw an opportunity to serve residents of the new subdivisions springing up on the edges of Palo Alto and Mountain View, began commercial development of former agricultural land northeast of the intersection of El Camino Real and San Antonio Road. When development began, the site was in unincorporated Santa Clara County; 20 acres were soon annexed by Mountain View. By 1954, the first phase of building at the San Antonio Shopping Center was complete. The first businesses in the center were a Consumers Cooperative Society grocery store and the Palo Alto Hardware Company store, located in a long, low-slung, flat-roofed building near the corner of El Camino Real and San Antonio Road. The grocery store occupied 30,000 square feet adjacent to the 10,000 square-foot hardware store. Both businesses had relocated from nearby Palo Alto. (In 2022, a Safeway store is located within this original building; although its footprint is nearly identical to its original 1954 construction, every other aspect of the building has been heavily altered.) The balance of the shopping center's real estate, which comprised another 10,000 square feet, was leased to various small businesses by owner-developer Northcutt, who was also the construction contractor. Contemporaneous documents do not suggest that these early buildings were architect-designed. An open-air shopping center or strip mall, San Antonio Shopping Center was Mountain View's first major retail development outside its 19th-century downtown (roughly 1.5 miles to the southeast). In the mid-1950s, these stores were among the first buildings in the neighborhood and the shopping center was bounded by orchards and open fields. [9]

San Antonio Shopping Center was continually expanded and altered over the ensuing decades. There does not appear to have been a master plan, and after the initial phase of development, new buildings were constructed both by successive owners of the property and by tenants with different architects and builders for each phase of development. One of the most notable early additions was the multi-million-dollar Sears department store in 1957, which became something of an anchor store for the outdoor mall. It was located north of the original grocery/hardware store building and its main façade was on San Antonio Rd. The building was developed by the Sears Corporation rather than by Northcutt. By the late 1950s, San Antonio Shopping Center included Woolworth's, Thrifty, and Purity Grocery Store, as well as smaller businesses such as a shoe store and a furniture store. New businesses either replaced businesses that had closed or constructed new buildings on the large property. In 1961, Showers Lane, which had been a narrow rural road, was substantially widened to accommodate traffic to the center. In 1964, for example, seven new stores were added with an additional four planned for 1965. By this time, ownership was shared between Northcutt Lumber Co., J. Cyril Johnson Inc., and Thoits Bros. Inc. Construction of the Menu Tree international restaurant in 1965 added dining to the center. By the early 1970s, the need for a facelift and expansion of the shopping center was under discussion, which was by this time was in competition with newly opened nearby indoor malls. Although its expansive parking areas and convenience to major thoroughfares had been important elements of its development 15 years earlier, city planners now identified a need to make San Antonio Shopping Center more pedestrian-oriented. 1970s expansion included the addition of the 66,000 square foot Mervyn's and the 67,000 square foot Best Products stores on the north end of the mall near the Purity Store (which by that time had become a fabric store). In 1990, the San Antonio Center was sold to Robert Buck with Hollis & Associates as the manager. In 1995, a large portion of the mall was demolished for the construction of a Walmart. In 2015, Jeremiah E. Buck, Alexander R. Buck, and Lindsay M. Buck transferred their father's holdings on the north end of the San Antonio Center to the San Antonio Center, LLC.

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[7] "The History of Strip Malls in America," Act For Libraries, Accessed July 28, 2022, http://www.actforlibraries.org/the-history-of-strip-malls-in-america/; Matthew J. Manning, "The Death and Life of Great American Strip Malls," Athens, Georgia: University of Georgia, 2009, 28-54, Accessed July 28, 2022, https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwil-6m0pZz5AhW2RjABHcD9CPYQFnoECCYQAQ&url=https%3A%2F%2Fgetd.libs.uga.edu%2Fpdfs%2Fmanning_matthew_j_200908_mhp.pdf&usg=AOvVaw3CO1r8-WGlVnUJDL41i7AZ.

[8] Daniel Herriges, "Revenge of the Strip Mall," *Strong Towns,* Feb. 25, 2020, Accessed July 28, 2022, https://www.strongtowns.org/journal/2020/2/25/revenge-of-the-strip-mall.

[9] *Daily Palo Alto Times,* "San Antonio co-op site," August 3, 1954, 1; *Daily Palo Alto Times, "*Peninsula Business: San Antonio Shopping Center Opens Tomorrow," Aug. 17, 1954, 2.

In 2017, Merlone Geier Partners developed the Village at the San Antonio Center, which consisted of a Safeway, apartments, and various shops and restaurants.[10]

Richard D. Northcutt (1901 – 1960)

A Texas native and World War I veteran, Richard D. Northcutt worked in the Northwest lumber industry for years before moving to California and starting the R. D. Northcutt Lumber Company of Palo Alto. He lived in Los Altos and then Los Gatos when he was developing the San Antonio Shopping Center. By the late 1950s, he had taken on local attorney Warren Thoits as a partner, who stayed involved as an owner and developer for decades. Northcutt had three sons, Richard B. Northcutt, Charles D. Northcutt, and Michael D. Northcutt, who inherited the Northcutt Lumber Co. and their father's shares of the San Antonio Shopping Center when Richard Northcutt died in 1960.[11]

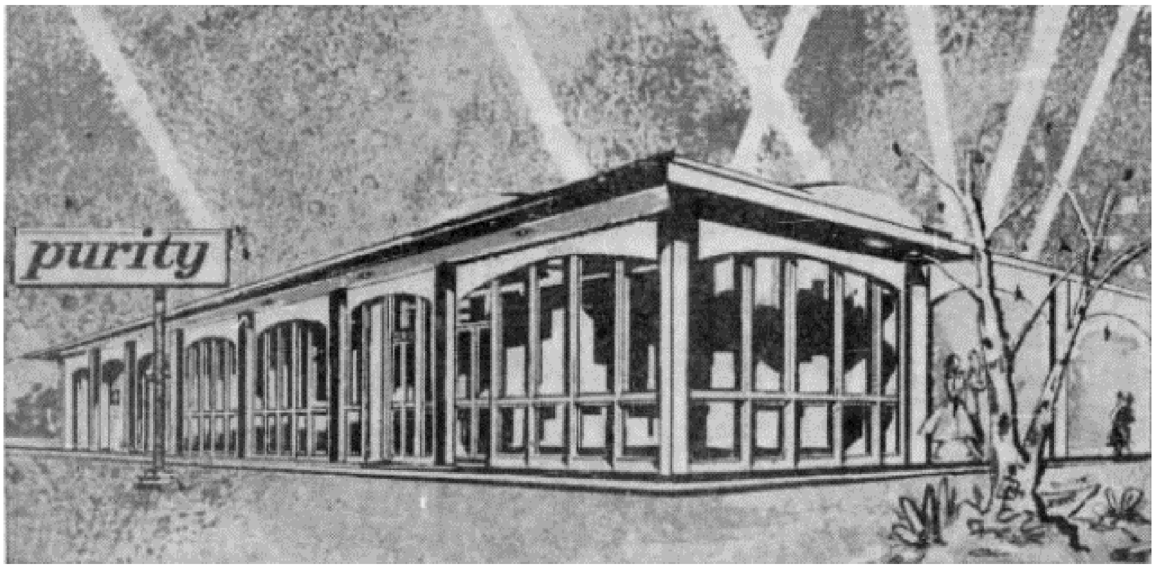


Figure 1: Rendering of Purity Stores, 1959 (*Palo Alto Times*).

[10] Nicholas Perry, *Images of America: Mountain View* (Charleston: Arcadia Publishing, 2006), 9, 15-16; *Palo Alto Times,* "30% Expansion Approved for San Antonio Center," Jan. 15, 1974, 1; *The San Francisco Examiner,* "San Antonio Shopping Center Sold," May 6, 1990, 66; *The Sacramento Bee,* "End of An Era: Will City Centers Make American Malls Obsolete," Nov. 13, 2016, A3.

[11] *Daily Palo Alto Times,* "Sears Ordered To Pay $27,000 in Lease Fee," Jun. 13, 1958, 17; *Daily Palo Alto Times,* "Organization Heads Express Confidence in Future of Area," Aug. 18, 1954, 30; *Palo Alto Times,* "Shop Center Owner R. D. Northcutt Dies," Feb. 27, 1960, 2.

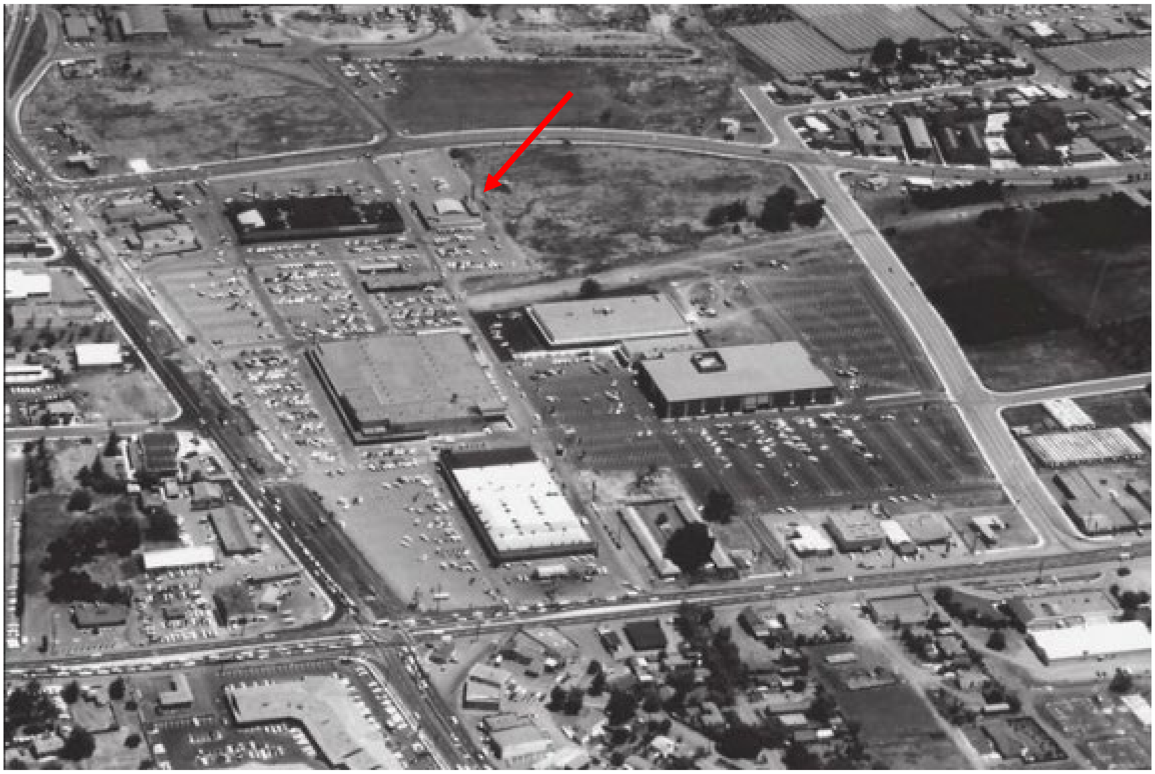

Figure 2: Arrow showing the Purity Stores building, 1961 (Mountain View Public Library).


Figure 3: Widening of Showers Drive, 1961 (Mountain View Public Library).

**State of California – The Resources Agency**
**DEPARTMENT OF PARKS AND RECREATION**
**CONTINUATION SHEET**

**Primary #** ________________
**HRI #** ________________
**Trinomial** ________________

**Page 15 of 20** ***Resource Name or # (Assigned by recorder)** 2550 W El Camino Real
***Recorded by** Kara Brunzell ***Date:** July 26, 2022 ☒ Continuation ☐ Update

Figure 4: San Antonio and California Ave, arrow showing Purity Stores building, 1961 (Mountain View Public Library).

Figure 5: Rendering of San Antonio Center with Mervyn's on the right, 1974 (*Palo Alto Times*).


Figure 6: San Antonio Shopping Center with Purity Store (Home Yardage) at the center showing original blank east façade and Best Products showroom to the left, 1980 (Mountain View Public Library).


Figure 7: San Antonio Center sign with Sears to the right, 1985 (Mountain View Public Library).

Purity Store, (435 San Antonio Road APN 148-22-009)
The building at 435 San Antonio Road sits at the north end of the San Antonio Center and was constructed 1959. The building was a new Purity Stores supermarket location, the 104th store in the California firm's chain. The store was designed by noted San Francisco architect John S. Bolles and built by Bishop-Mattei Construction Company of San Francisco. Its central vaulted roof echoed the arched-roof corporate building template that had been established by Purity Stores decades before, which allowed store interiors to be free of obstructing columns. In this building the arched center was surrounded by a flat-roofed volume, a unique design created by Bolles. In 1971, the building became the location of a Home Yardage West fabric store after Purity Stores closed the location. From 1978 to 1997, it was used by New York Fabrics and Crafts of Pleasant Hill, Inc. The building was apparently remodeled in the late 1990s with the addition of a raised cornice above the main entrance prior to its conversion to use as a Jo-Ann's fabric store. Some original windows may have been infilled or painted over around the same time. In 2015, the property was transferred to San Antonio Center, LLC. By 2022, it was the Landsby Leasing Center.[12]

*Supermarket/Purity Stores Historic Context*
Traditionally, food sellers operated individual shops separated by product type, with full-service butchers, bakers, greengrocers, and dry goods stores operating independently near one another in downtown areas. Customers sent in written orders or stood at a counter where a clerk retrieved each requested product. There was no specialized architecture for these food shops; they were typically in downtown storefront buildings like nearby clothing, hardware, and other retail establishments. Although size varied from store to store, traditional food shops were much smaller than current supermarkets. This model persisted through first decade of the twentieth century. In 1916, Clarence Saunders opened the first Piggly Wiggly grocery store in Memphis, Tennessee. Its central innovation was its self-service model, which allowed customers to choose their own products off shelves and cut labor costs by slashing the required number of grocery clerks. Although other merchants came up with a similar concept about the same time in other regions of the US, Saunders began patenting his model and is therefore often credited with the invention of the supermarket. Early self-service grocery stores were located in existing downtown storefront buildings like their predecessors, but in the 1920s, grocery chains began to appear and they started designing larger purpose-built stores that were more friendly to the automobile. The term super-market (at first hyphenated) also appeared in the 1920s. Although the Great Depression was a time of economic contraction, its dislocations spurred innovation in the grocery industry, in part because of the cost savings inherent to the self-service model. By the mid-1930s, architects were designing stores with clear-span arched roofs to eliminate the need for interior supports that would block views of products, reducing or eliminating the glass storefront, and standardizing features across individual stores in grocery chains. The decade also saw important innovations like the introduction of the grocery cart in 1937. By 1955, supermarkets accounted for 60% of consumer food spending in the US, and their early association with cost consciousness had evolved into a symbolic association with consumer choice, abundance, and American capitalism. [13]

Established in San Francisco in 1925, Purity Stores was a California grocery store chain that was established at the dawn of the supermarket era. By 1927, there were 80 Purity Stores from San Francisco to Mountain View. The chain competed on price and was known for innovative practices and store design. One of its innovations was the use of conveyor belts to deliver groceries from the checkout stand to the parking lot. At first, branches of the chain moved into existing retail buildings, but in the late 1930s, the company began constructing its own buildings. Although design details varied from store to store, roofs with wide steel truss arches were typically used, eliminating the need for interior bearing columns and giving stores a wide-open feel. Famed Los Angeles architect Stiles O. Clements had used this roof form for the Ralph's grocery store chain by 1937; Purity Stores may have been using the building form as early as 1935, but its specific date and location of origin is somewhat unclear. The company may have mimicked Clements's design or may have independently developed the use of the arched roof. Purity Stores used a "rainbow" arch that was continuous from ground level, creating a simple building form similar to a Quonset hut (which it preceded by several years). Research has not revealed an architect associated with the signature Purity Stores building, and the simplicity of the form suggests that it may have been a pragmatic vernacular design by a builder. The chain utilized this building style through the 1950s, ultimately building dozens of examples. The company's

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[12] *Palo Alto Times,* "New Purity Store to Open on Monday," Mar. 6, 1959; *Peninsula Times Tribune,* Purity Stores Advertisement, Sep. 21, 1960, 44; *Peninsula Times Tribune,* "Sales/Cashier," Aug. 26, 1977, 40; *Palo Alto Times,* "Home Yardage West: Notice to Creditors of Intended Bulk Transfer," Apr. 10, 1978, 43; *San Francisco Examiner,* "New York Fabrics," Sep. 30, 1987, 92.

[13] Kat Eschner, "The Bizarre Story of Piggly Wiggly," September 6, 2017, Smithsonian Magazine; Benjamin Leech, Penn Fruit Supermarket Nomination, preservation Alliance for Greater Philadelphia, March 23, 2016; Architectural Forum, Planning Techniques for New and Remodeled Buildings, Number 9, Food Stores, March 1938.

headquarters and 3-story warehouse were located in San Francisco. The family-owned chain expanded through the 1950s until it had at least 104 stores in Central and Northern California.[14]

*John R. Niven*

John R. Niven (1890-1961) founded Purity Stores, Inc. and was president of the company. Niven had been general manager of the Van Camp Packing Company in Indianapolis before moving to California in 1925. His son, John R. Niven Jr., became president of the company after Niven's retirement in 1955. In 1970, C. L. Pecchenino replaced John R. Niven Jr. as president of the company. By the 1970s, many of the Purity Stores locations had closed as the company began facing competition from national chains who were building much larger stores during this era. In 1972, John Niven Jr. formed a new company, the Northern California Supermarkets, Inc., and bought the Purity Stores name and locations from the old firm. After this transaction, Northern California Supermarkets, Inc. rebranded Purity Stores to "Purity Friendly Markets" and opened two new locations in Novato and Rohnert Park.[15]

*Bishop-Mattei Construction Company*

In 1956, the Bishop Younger, Bradley Company consolidated with Peter O. Mattei Construction to form the Bishop-Mattei Construction Company. Frank C. Bishop was the president of the company, while Peter Mattei was vice president and James Paul Oppenheim was the general manager of the company. Oppenheim was also vice president of the C-B Building Corporation of Los Angeles. Both the Bishop-Mattei Construction Company and the C-B Building Corporation were part of the Bishop Group of Engineering and Construction Companies. The company built shopping centers throughout the greater Bay Area region, as well as a hospital in Plumas County during the 1950s and early 1960s. Peter Orchard Mattei (1925-1998) graduated with a master's degree in architecture from University of California (UC), Berkeley in 1949. He started his career as a general contractor in the 1950s and became a real estate developer in the 1960s and a real estate broker in the 1970s.[16]

*John S. Bolles*

John Savage Bolles (1905-1983) was born in Berkeley and was the son of San Francisco architect Edward Bolles. He attended UC Berkeley and studied engineering at the University of Oklahoma. In 1932, Bolles received a master's degree in architecture from Harvard. He participated in archaeological expeditions to Turkey, Egypt, and Iran, and worked for a time in the Yucatán, publishing a book about Chichen Itza. By 1936, Bolles had started working at his father's firm. In 1939, Bolles and Joseph Francis Ward started their firm, Ward & Bolles. In 1939, Bolles designed buildings at the International Exposition at Treasure Island. Like many architects of his generation, he worked on federal public housing during World War II. In 1954, Bolles dissolved the partnership and started his own firm, John S. Bolles Associates, which became a prominent company in the Bay Area through the 1970s. The firm designed industrial, commercial, and retail projects. Its most famous project was Candlestick Park Stadium, built in 1960 for the San Francisco Giants baseball team. Bolles was prolific, and other notable works included the Ping Yuen Annex in San Francisco's Chinatown, IBM Corporation campus (1955) in San Jose, the Paul Masson Champagne Plant (1963) in Saratoga, and nine Macy's stores in Palo Alto and other California cities. Bolles was a San Francisco resident and served on the board of the San Francisco Art Institute. He and his wife Gail had three sons and two daughters.[17]

<u>Mervyn's (350 Showers Drive APN 148-22-012)</u>

The building at 350 Showers Drive was built about 1974 as a Mervyn's department store. At the time, Mervyn's was the fastest growing California chain of department stores. From 1977 until the 1980s, the building was also the location of the Mercury Savings and Loan Association. It remained a Mervyn's into the 1990s. In 2015, the property was transferred to the San Antonio Center, LLC., and by 2022, it

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[14] *Palo Alto Times,* "New Purity Store to Open on Monday," Mar. 6, 1959.

[15] *Petaluma Argus-Courier,* "Formal Opening of New Chain Store Saturday," Jul. 5, 1928, 9; *Peninsula Times Tribune,* "New P.A. Purity Store Features Many Innovations," Jan. 12, 1955, 31; *The Hanford Sentinel,* "Funeral Set for Food Store Head," Sep. 14, 1961, 14; *Redwood City Tribune,* "Purity Stores Founder Dies in Sleep," Sep. 14, 1961, 2; *Redwood City Tribune,* "Woodside Executive Heads Purity Stores," Aug. 19, 1970, 16; *Tracy Press,* "New Owner, But Same Name for Purity Market," Jul. 5, 1972, 18; *Healdsburg Tribune,* "New Company in Hayward Buys Purity," Jul. 6, 1972, 2; *Daily Independent Journal,* "Purity Stores Makes Comeback In Novato, Rohnert Park," Jun. 24, 1974, 29.

[16] *San Francisco Examiner,* "Construction Co. to Merge July 1," Jun. 19, 1956, 28; *Daily Independent Journal,* "'Veep' Again," Jan. 7, 1959, 24; *The Napa Valley Register,* "Obituaries: Peter Mattei," Jan. 9, 1998, 15.

[17] American Architects Directory, American Institute of Architects, 1970; *San Francisco Examiner,* John Bolles, March 6, 1983; *Independent Coast Observer,* "Obituary: John Savage Bolles," Mar. 11, 1983, 18.

was a Kohl's store. Except for the small storefronts at its south end and altered signage to reflect the branding of the new business, it has been altered very little since its original construction. [18]

510 and 520 Showers Drive (APN 148-22-011)

510 and 520 Showers Drive are at the south end of the Mervyn's building at 350 Showers Drive. Both appear to have been constructed as part of the original 1974 building and appear to have been extensively remodeled about 2000 to match the decorative treatment of the Best Products building executed at about the same time. In 2015, the property was transferred to the San Antonio Center, LLC.[19]

Best Products (2535 California Street APN 148-22-010)

Another building at the north end of the San Antonio Center, 2535 California Street, was built in 1974. From 1974 until 1994, it was a showroom for the Best Products Company, Inc. After Best Products Co., the building was an Albertson's grocery store. In 2000, the building was used by Lucky Stores, Savon Drugs, and Bank of America. It was likely remodeled into its current form in the 1990s when it became a grocery store, with the removal of the heavy decorative roof treatment over its north façade entrance and the addition of ornamental pilasters and cornice. In 2007, it became the location of a Crown Books. In 2015, the property was transferred to the San Antonio Center, LLC., and by 2022, it was a 24-Hour Fitness gym.[20]

**Evaluation**:

The National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) require that a significance criterion from A-D or 1-4 (respectively) be met for a resource to be eligible.

Criterion A/1: San Antonio Shopping Center is significantly associated with the postwar commercial and residential expansion of Mountain View and the transformation of the region from an agricultural economy to Silicon Valley suburbs. When the first stores at the center opened in 1954 t, they were the first local retail operations outside downtown Mountain View and were surrounded by orchards and open fields. San Antonio Shopping Center initiated the development of the formerly rural San Antonio District into an important commercial and population center for the growing town. Mountain View annexed the area shortly after construction of the shopping center. The addition of a Sears store brought a national chain outlet to San Antonio Shopping Center and the cachet of a corporate department store; for decades, Sears was an anchor store for the center. Local historian Nicholas Perry has stated that the opening of Sears "signaled the rise of San Antonio Road as Mountain View's new commercial center."[21] The dynamic shopping center was the site of continuous expansion and development, with new commercial buildings being constructed on adjacent open land and new businesses moving into existing stores over the decades. Other types of development, including the influential Shockley Semiconductor, followed the shopping center to the San Antonio District. Two indoor malls were constructed in the neighborhood in 1966 and 1975 (by 1994 both had shut down while the San Antonio Shopping Center continued to operate). Residential subdivisions were constructed nearby, many of which were later replaced with higher-density apartment and townhouse construction as the town and region continued to grow over the decades. Radical alterations to San Antonio Shopping Center, beginning in the 1990s, compromised its historic integrity: the 1954 buildings were renovated beyond recognition, Sears was demolished, San Antonio Village was developed, and the exterior fabric of the 1974 Best Products building was completely replaced. For these reasons, the shopping center as a whole does not retain integrity. The individual stores that date from the historic era are not able to convey the history of the entire shopping center and research has revealed no significant associations between individual stores and any important historic contexts. Therefore, the San Antonio Shopping Center meets the significance criterion for historic eligibility but lacks the integrity required for historic listing. For these reasons, the property is recommended not eligible to the NRHP or CRHR under Criterion A/1.

Criterion B/2: The property is not associated with the life of persons important to our history. R. D. Northcutt made a significant contribution to the development of Mountain View, but he died in 1960 before historic-era development of the San Antonio Shopping Center was complete. Research has revealed no important professional accomplishments or impacts on local history by other individuals

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[18] *The Sacramento Bee,* Mervyn's Advertisement, Aug. 25, 1975, 88; *Peninsula Times Tribune,* "The Palo Alto African Violet Society," Sep. 7, 1984, 94; *Peninsula Times Tribune,* "Annual Craft Auction Scheduled," Oct. 31, 1977, 17; *San Francisco Examiner,* "Join Our Team," Sep. 25, 1995, 20.

[19] *San Francisco Examiner,* Frame-n-Lens Advertisement, Nov. 16, 1995, 13; *Palo Alto Times,* "San Antonio Shopping Center," Oct. 31, 1974, 68.

[20] *Peninsula Times Tribune,* "Last 2 Days Tru-Specials," May 8, 1975, 52; *Peninsula Times Tribune,* "Employment Opportunities," Aug. 13, 1975, 28; *San Francisco Examiner,* "Customer Service Supervisor," Sep. 18, 1994, 104.

[21] Nicholas Perry, *Then & Now: Mountain View*, Arcadia Publishing, Charleston South Carolina: 2012, 72.

associated with the property. Therefore, the property lacks the strength of association required for eligibility under Criterion B/2. The property is recommended not eligible to the NRHP or CRHR under Criterion B/2.

Criterion C/3: The property is not significant for its architecture. The Purity Store building is an interesting work by an important architect, John S. Bolles. Bolles was at the height of his career when he designed this building, having recently completed the nearby IBM campus and having begun design for Candlestick Park, his most significant work. The Purity Store building exhibits a bold and unusual roof form, with a centered groined vault surrounded by a flat roof. This design choice demonstrates Bolles ability to innovate while working within an established architectural program. The vaulted roof allowed for the interior openness that was an important element of Purity Stores' business model and cleverly referenced the barrel-arched roof of the chain's long-established architectural program. Other aspects of the building, however, appear to have been less carefully designed. The use of wide flared eaves only on the north façade makes for an awkward transition at the highly visible east and west façades. The arched bays with windows display a stylish Modernism, but the blind-arched bays can be described as utilitarian. And although Bolles was constantly covered in the architectural press, research in trade journals of the era has not revealed any awards for the design of this building or any coverage of its construction in architecture or engineering publications. For these reasons, the building is not among the finest examples of his work and is not particularly representative of his architectural ability. Furthermore, its original Modernism has been compromised by the addition of an inappropriate parapet with cornice on the east elevation.

Research has revealed no evidence that the 1974 buildings were designed by an architect or an important local contractor, nor do they exhibit design elements present in architectural landmarks. The Best Products building has been altered beyond recognition and does not retain integrity. Mervyn's lacks architectural significance; its modest decorative features are indicative of a cost-conscious corporate architecture program designed to quickly build a large number of stores. It lacks the architectural distinction of landmark examples of late-Modern commercial buildings. For the reasons discussed above, the property is recommended not eligible to the NRHP or CRHR under Criterion C/3.

Criterion D/4: In rare instances, buildings themselves can serve as sources of important information about historic construction materials or technologies and be significant under Criterion D/4. All the buildings on the property are examples of well-understood types of construction and do not appear to be a principal source of important information in this regard.

The property is not recommended not eligible for listing on the NRHP or CRHR and therefore does not qualify as a historical resource under CEQA.

# APPENDIX F
# NOISE

## Construction Noise Calculations

| Construction Phase | Equipment[1] | No. Equipment[1] | Acoustical Usage Factor[2] | Maximum Noise Level @ 50 feet (Lmax)[3] | Typical Noise Level @ 50 feet ($dBA_1$) | Reference Distance ($D_1$) | Distance to Receptor ($D_2$) | Ground Absorption Constant (G) | Noise Level at Receptor ($dBA_2$) | Two Noisiest Equipment |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Unit | % | dBA Lmax | dBA Leq | feet | feet | unitless | dBA Leq | dBA Leq |
| Demolition | Tractors/Loaders/Backhoes | 2 | 40 | 80 | 76 | 50 | 60 | 0 | 74 | 83 |
| | Excavators | 1 | 82 | 85 | 84 | 50 | 60 | 0 | 83 | |
| Site Preparation | Rubber Tired Dozers | 3 | 40 | 85 | 81 | 50 | 60 | 0 | 79 | 82 |
| | Tractors/Loaders/Backhoes | 4 | 40 | 80 | 76 | 50 | 60 | 0 | 74 | |
| Grading | Excavators | 1 | 85 | 85 | 84 | 50 | 60 | 0 | 83 | 84 |
| | Graders | 1 | 40 | 85 | 81 | 50 | 60 | 0 | 79 | |
| | Rubber Tired Dozers | 1 | 20 | 85 | 78 | 50 | 60 | 0 | 76 | |
| | Tractors/Loaders/Backhoes | 3 | 40 | 80 | 76 | 50 | 60 | 0 | 74 | |
| Building Construction | Cranes | 1 | 16 | 88 | 80 | 50 | 60 | 0 | 78 | 81 |
| | Generator Sets | 1 | 50 | 82 | 79 | 50 | 60 | 0 | 77 | |
| | Tractors/Loaders/Backhoes | 3 | 40 | 80 | 76 | 50 | 60 | 0 | 74 | |
| Paving | Paving equipment | 2 | 50 | 85 | 82 | 50 | 60 | 0 | 80 | 83 |
| | Pavers | 2 | 50 | 85 | 82 | 50 | 60 | 0 | 80 | |
| | Rollers | 2 | 20 | 85 | 78 | 50 | 60 | 0 | 76 | |
| Architectural Coating | Air Compressors | 1 | 40 | 80 | 76 | 50 | 60 | 0 | 74 | 74 |

Notes:

Noise level at the receptor calculated based on the following equation:[4]

$dBA_2 = dBA_1 + 10 * \log_{10}(D_1/D_2)^{2+G}$

Where:

$dBA_2$ = Noise level at receptor

$dBA_1$ = Noise level at reference distance

$D_1$ = Reference distance

$D_2$ = Receptor distance

G = Ground absorption constant (0 for hard surface, 0.5 for soft surface)

Combined noise levels at receptor calculated for two noisiest equipment using decibel addition:

$L = 10 * \log_{10} (10\text{^}(L_1/10)+10\text{^}(L_2/10))$

L = Combined noise level

$L_1$ = Noise level for first noisiest piece of equipment

$L_2$ = Noise level for second noisiest piece of equipment

[1] Demolition equipment was provided by the project applicant. Other equipment based on the default off-road construction equipment list from CalEEMod v. 2022.1. Only equipment that generates substantial noise is shown.

[2] U.S. Department of Transportation, 2006. FHWA Highway Construction Noise Handbook, Table 9.1. August.

[3] Federal Transit Administration, 2018. Transit Noise and Vibration Impact Assessment Manual, Table 7-1. September.

[4] California Department of Transportation, 1998. Technical Noise Supplement (TeNS). Equation N-2141.2. October.

## Net Change in AM Peak Hour Traffic at Nearby Roadway Intersections for Noise Assessment

| Intersection | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | Total Traffic Volume | Net Increase |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **California Street and San Antonio Road** | | | | | | | | | | | | | | |
| Existing | 270 | 41 | 24 | 79 | 58 | 294 | 14 | 808 | 37 | 246 | 661 | 123 | 2,655 | 0% |
| Existing + Project | 270 | 61 | 24 | 118 | 77 | 313 | 14 | 808 | 37 | 266 | 661 | 123 | 2,772 | 4% |
| Cumulative | 289 | 68 | 26 | 377 | 61 | 104 | 55 | 961 | 70 | 417 | 1,220 | 145 | 3,793 | 43% |
| Cumulative + Project | 289 | 88 | 26 | 416 | 80 | 123 | 55 | 961 | 70 | 437 | 1,220 | 145 | 3,910 | 47% |
| **California Street and Pacchetti Way** | | | | | | | | | | | | | | |
| Existing | 16 | 187 | 77 | 24 | 328 | 5 | 51 | 1 | 19 | 14 | 3 | 53 | 778 | 0% |
| Existing + Project | 16 | 187 | 117 | 64 | 328 | 5 | 128 | 1 | 117 | 14 | 3 | 53 | 1,033 | 33% |
| Cumulative | 39 | 254 | 127 | 13 | 373 | 6 | 77 | 9 | 11 | 13 | 9 | 90 | 1,021 | 31% |
| Cumulative + Project | 39 | 254 | 167 | 53 | 373 | 6 | 154 | 9 | 109 | 13 | 9 | 90 | 1,276 | 64% |
| **California Street and Showers Drive** | | | | | | | | | | | | | | |
| Existing | 3 | 150 | 57 | 101 | 241 | 17 | 66 | 40 | 76 | 27 | 87 | 67 | 932 | 0% |
| Existing + Project | 22 | 170 | 116 | 101 | 261 | 17 | 66 | 40 | 76 | 27 | 87 | 87 | 1,070 | 15% |
| Cumulative | 17 | 208 | 65 | 151 | 296 | 28 | 110 | 53 | 75 | 28 | 90 | 59 | 1,180 | 27% |
| Cumulative + Project | 36 | 228 | 124 | 151 | 316 | 28 | 110 | 53 | 75 | 28 | 90 | 79 | 1,318 | 41% |
| **Showers Drive and Hetch Hetchy ROW** | | | | | | | | | | | | | | |
| Existing | 10 | 0 | 1 | | | | 5 | 180 | | | 241 | 5 | 442 | 0% |
| Existing + Project | 10 | 0 | 1 | 0 | 0 | 0 | 65 | 180 | 0 | 0 | 300 | 5 | 561 | 27% |
| Cumulative | 12 | 0 | 1 | | | | 6 | 246 | | | 310 | 6 | 581 | 31% |
| Cumulative + Project | 12 | 0 | 1 | | | | 66 | 246 | | | 369 | 6 | 700 | 58% |

Notes:

Existing scenario = Existing traffic when stores operate at partial capacity.

Project + Existing = Existing traffic plus project-generated traffic.

Cumulative = Cumulative traffic.

Project + Cumulative = Cumulative traffic plus project-generated traffic.

EBL: Eastbound Left turn
EBT: Eastbound Though
EBU: Eastbound U-turn

WBL: Westbound Left turn
WBT: Westbound Though
WBU: Westbound U-turn

NBL: Northbound Left turn
NBT: Northbound Though
NBU: Northbound U-turn

SBL: Southbound Left turn
SBT: Southbound Though
SBU: Southbound U-turn

Based on traffic count data collected by Parametrix on 7 February 2023.

## Construction Vibration Calculations for Potential Disturbance

| Equipment[1] | Typical Vibration Level @ 25 Feet[2] ($RMS_1$) | Annoyance Vibration Threshold ($RMS_2$) | Reference Distance ($D_1$) | Buffer Distance to Annoyance Threshold ($D_2$) |
|---|---|---|---|---|
| Unit | VdB | VdB | feet | feet |
| Vibratory Roller | 94 | 80 | 25 | 73 |
| Large bulldozer | 87 | 80 | 25 | 43 |
| Loaded trucks | 86 | 80 | 25 | 40 |
| Small bulldozer | 58 | 80 | 25 | 5 |

Notes:

Buffer distance to vibration threshold for human annoyance calculated based on the following equation:[3]

$D_2 = D_1 * 10^{((RMS_1 - RMS_2) / 30)}$

Where:

$RMS_1$ = Vibration level at reference distance

$RMS_2$ = Vibration threshold for human disturbance

$D_1$ = Reference distance

$D_2$ = Buffer distance to vibration threshold for human annoyance

## Construction Vibration Calculations for Potential Building Damage

| Equipment[1] | Typical Vibration Level @ 25 Feet[2] ($PPV_1$) | Building Damage Vibration Threshold ($PPV_2$) | Reference Distance ($D_1$) | Buffer Distance to Damage Threshold ($D_2$) |
|---|---|---|---|---|
| Unit | in/sec | in/sec | feet | feet |
| Vibratory Roller | 0.210 | 0.3 | 25 | 20 |
| Large bulldozer | 0.089 | 0.3 | 25 | 11 |
| Loaded trucks | 0.076 | 0.3 | 25 | 10 |
| Small bulldozer | 0.003 | 0.3 | 25 | 1 |

Notes:

Buffer distance to vibration threshold for building damage calculated based on the following equation:[3]

$D_2 = (PPV_1 / PPV_2)^{(1 / 1.5)} * D_1$

Where:

$PPV_1$ = Vibration level at reference distance

$PPV_2$ = Vibration threshold for building damage

$D_1$ = Reference distance

$D_2$ = Buffer distance to vibration threshold for building damage

[1] Demolition equipment provided by project applicant, and other equipment based on the CalEEMod default generated for the project. Only equipment that generates substantial vibration is shown.

[2] Federal Transit Administration, 2018. Transit Noise and Vibration Impact Assessment Manual, Table 7-4. September.

[3] Federal Transit Administration, 2018. Transit Noise and Vibration Impact Assessment Manual, Equations 7-2 and 7-3. September

# APPENDIX G
# UTILITY IMPACT STUDY

Schaaf & Wheeler
CONSULTING CIVIL ENGINEERS

4699 Old Ironsides Dr., Suite 350
Santa Clara, CA 95054-1860
t. 408-246-4848
info@swsv.com

# MEMORANDUM

| | | | |
|---|---|---|---|
| TO: | Erik Walukiewicz (Los Altos School District) | DATE: | December 19, 2023 |
| FROM: | Leif Coponen, PE; Brett Crews, PE | JOB#: | LASD.01.23 |
| SUBJECT: | 10th Site School Project – Utility Impact Study | | |

REGISTERED PROFESSIONAL ENGINEER
LEIF M. COPONEN
C70139
CIVIL
STATE OF CALIFORNIA

## Executive Summary

The Los Altos School District (LASD) has retained Schaaf & Wheeler to determine impacts from the 10th Site School Project (Project) on the City of Mountain View's (City) potable water and sanitary sewer systems. This memorandum and its findings will be used to assist the LASD with planning efforts. The Project site is located at the southwest corner of California Street and Showers Drive. The Project proposes to construct a two-story school that could serve up to 900 students along with playfields, parking areas, and hardscape. The Project site encompasses a total area of 11.7-acres and slates 2-acres in the northwest corner to be a future neighborhood park owned by the City. The Project area encompasses a total of 5 existing parcels. The Project site is shown in Figure 1.

This memo is a confirmation of existing studies and does not include a detailed impact study. The incremental difference in potable water demand and sanitary sewer flow is estimated for the proposed Project development and the impact of the incremental differences on the utility systems are evaluated for both an Existing and Future Cumulative Condition. The Existing Condition is evaluated to determine any Project impacts on the City's utility systems with current infrastructure and current landuse throughout the city. The Future Cumulative Condition is evaluated to determine any Project impacts on the City's utility systems with future planned infrastructure and future planned landuse and growth. Previous technical studies encompassing the Project area include: 2022 Water Master Plan (WMP) and 2022 Sewer Master Plan (SMP). Projected potable water demand and sanitary sewer flow generation for the proposed School Project are based on previous school site studies within the City boundaries.

Based on the findings and recommendations of the previous technical studies, the Project does not contribute to additional deficiencies in the water system. The proposed Project decreases the total base water demand for the site by 21,785 gpd under existing modeled conditions and by 3,757 gpd under future cumulative modeled conditions. The system is sufficient to maintain minimum pressures under peak hour demand (PHD) with and without the Project flow in the Existing and Future Condition. There is sufficient capacity in the water system to serve fire flows at and around the Project site in the Existing & Future Condition. The Project does not contribute to new deficiencies. There are no CIPs nor Annual Replacement Projects directly adjacent to the Project from the 2022 WMP; however, there are Annual Replacement Projects in the area. The associated Project water demands do not significantly impact the water system in the Future Cumulative Condition assuming CIPs are constructed. The City's water system is sufficient to support future cumulative demands and required fire flows at the Project site.

Based on the findings and recommendations of the previous technical studies, the Project does not contribute to additional deficiencies in the sewer system. There are no deficiencies along the flow path in the Existing Condition nor in the Future Cumulative Condition pre- and post-Project. The proposed Project decreases the total base sewer generation for the site by 12,777 gpd under existing modeled conditions and increases the total base sewer generation 2,275 GPD gpd under future cumulative modeled conditions. The increased Project sewer flows do not significantly impact the sewer system.

## Introduction

The Project proposes to construct a two-story school that could serve up to 900 students along with playfields, parking areas, and hardscape. This study estimates the incremental difference in water demand and sewer flow resulting from Project development and evaluates impacts compared to previous study findings. The incremental difference is added to the City's existing models for Existing and Future Cumulative Conditions. Note, because the demand is decreased in the existing condition for both water and sewer, post-project is not studied; only the existing system is considered to ensure no deficiencies exist at the Project site. In the Future Condition, the pre-Project water system is only considered to ensure no deficiencies exist at the Project site; however, the pre- and post-Project sewer system is studied due to the increase in sewer generation. The Existing and Future Cumulative Conditions use the City's models developed as part of the 2022 WMP and SMP. Projected increase in demands across the City in the Future Cumulative Condition model are consistent with growth projections from the 2020 Urban Water Management Plan (UWMP) for the planning horizon year 2030.

## Water System Impact

### Incremental Project Contribution

The incremental difference in Average Daily Demand (ADD) with the Project is 21,785 GPD less than the Existing demand and 3,757 GPD less than the Future Cumulative demand allocated in the models. The ADD is an estimated daily average demand based on totalized annual water use.

Project water demand is estimated from the maximum number of student enrollment provided in the Draft EIR dated August, 2023. Table 1 shows the Project demand estimation using water unit duty factor from a previous school site analysis within the City. This factor is used to remain consistent with the City-wide model. Table 2 presents the water demand in the City's hydraulic models for the Existing Condition, and Table 3 shows the water demand for the Future Cumulative Condition. The Project site is serviced by one 8-inch water main along California Avenue.

**Table 1: Project Estimated Water Demand**

| Project | Individual Use | Students | Generation Factor (gpd/student) | Water Demand (gpd) |
|---|---|---|---|---|
| 10th Site School | School | 900 | 13.01 | 11,709 |
| **Total** | | | | **11,709** |

**Table 2: Existing Model Water Demand**

| APN | Land Use | Modeled Water Demand (gpd) |
|---|---|---|
| 148-22-009 | Commercial | 2,549 |
| 148-22-010* | Commercial | 18,590 |
| 148-22-011 | Commercial | 994 |
| 148-22-012 | Commercial | 10,613 |
| 148-22-013 | Commercial | 749 |
| **Total** | | **33,494** |

** Designated as a Large Water User in the 2022 WMP*

**Table 3: Future Cumulative Model Water Demand**

| APN | Land Use | Modeled Water Demand (gpd) |
|---|---|---|
| 148-22-009 | Commercial | 2,549 |
| 148-22-010 | Commercial | 5,645 |
| 148-22-011 | Commercial | 533 |
| 148-22-012 | Commercial | 6,322 |
| 148-22-013 | Commercial | 418 |
| **Total** | | **15,466** |

## Fire Flow Requirement

The required planning-level fire flow at the Project site in the 2022 WMP is 3,500 gpm for existing and future conditions, respectively. The Project required fire flow is 2,500 gpm based on planning-level required fire flows for Public/Schools lands use. The actual fire flow requirement may change as the planning process continues and project-specific requirements are determined by the City and State Fire Marshal. Project plans at this time are not detailed enough to determine Project specific fire flows.

## Model Results

The water system is evaluated under Peak Hour Demand (PHD) to ensure a minimum pressure of 40 psi can be maintained per the City's design performance criteria. A peaking factor of 1.73, taken from the 2022 WMP, is applied to the average daily water demand. There are no existing hydraulic deficiencies per the minimum pressure requirements near the Project site in either the Existing or Future Cumulative condition. The system has capacity for the increased Project demand while meeting PHD performance criteria and does not affect previous study findings.

The water system is also evaluated to ensure adequate capacity is available to convey fire flows under Maximum-Day Demand (MDD) conditions while maintaining a minimum pressure of 20 psi in the system. A peaking factor of 1.25, taken from the 2022 WMP, is applied to the ADD to represent MDD conditions for which the fire flow analysis is conducted. From the previous studies, the planning-level fire flow requirement is met at the Project site in the Existing Conditions as shown in Figure 2. In the Existing Conditions, pre- and post-project available fire flow is 4,963 gpm. There are multiple deficiencies to the west and southeast of the Project. The Project demands have no impact on the available flows at these deficient locations.

The Future Cumulative Conditions planning-level fire flow requirements are met at the Project site assuming all CIPs outlined in the 2022 WMP, are constructed. There are deficiencies to the west and southeast of the Project pre- or post-Project. The Project does not have any impact on the available flows at the deficient nodes. There are no CIPs nor Annual Replacement Projects adjacent to the Project from the 2022 WMP.

**Project Contribution to Existing Deficiencies**

There are no deficiencies at the Project site in the Existing Condition nor in the Future Cumulative Condition, assuming all the CIPs outlined in the 2022 WMP have been constructed. The system has sufficient capacity to serve the Project. There are multiple deficiencies in the Existing and Future Cumulative Condition to the west and southeast of the Project. The Project flows have no impact on the available flows at these deficient locations.

## Sewer System Impact

**Incremental Project Contribution**

The incremental difference in Base Wastewater Flow (BWF) with the Project is 12,777 GPD less than the Existing flow and 2,275 GPD greater than the Future Cumulative flow estimate in the computer models. Base wastewater flow (BWF) is from residential, commercial, institutional, office and industrial sources and represents a daily average for wastewater flows and is used to model City-wide demands.

Project sewer generation is estimated from the maximum number of student enrollment provided in the Draft EIR dated August 2023. Table 4 shows the estimated Project sewer flow using sewer generation factor from previous school site studies within the City. This factor is used to remain consistent with the City-wide model. Table 5 presents the sewer generation in the City's hydraulic models for the Existing Condition, and Table 6 shows the sewer generation for the Future Cumulative Condition. The sewer flow from the Project is assumed to discharge to sewer mains on two streets, California Street and Showers Drive. The proposed sewer system connections are assumed to be to the existing 8-inch VCP sanitary sewer line on California Street and a 8-inch VCP sanitary sewer line on Showers Drive.

**Table 4: Project Estimated Sewer Flow**

| Address | Individual Use | Students | Generation Factor (gpd/student) | Sewer Generation (gpd) |
|---|---|---|---|---|
| 10th Site School | Public Facility | 900 | 11.71 | 10,539 |
| **Total** | | | | **10,539** |

**Table 5: Existing Model Sewer Flow**

| APN | Land Use | Modeled Water Demand (gpd) |
|---|---|---|
| 148-22-009 | Commercial | 1,782 |
| 148-22-010* | Commercial | 13,724 |
| 148-22-011 | Commercial | 690 |
| 148-22-012 | Commercial | 6,612 |
| 148-22-013 | Commercial | 508 |
| **Total** | | **23,316** |

** Designated as a Large Discharger in the 2022 SMP*

**Table 6: Future Cumulative Model Sewer Flow**

| APN | Land Use | Modeled Water Demand (gpd) |
|---|---|---|
| 148-22-009 | Public Facility | 891 |
| 148-22-010 | Public Facility | 3,468 |
| 148-22-011 | Public Facility | 345 |
| 148-22-012 | Public Facility | 3,306 |
| 148-22-013 | Public Facility | 254 |
| **Total** | | **8,264** |

The sewer flows generated within the San Antonio Precise Plan that drain through the Los Altos Trunk (San Antonio Interceptor Sewer) are limited by the capacity agreement between the City of Los Altos and the City of Mountain View. Per the capacity agreement, the maximum allowable Mountain View flow into the San Antonio Interceptor is 2 million gallons per day under PWWF conditions. Table 7 provides a comparison of PWWFs at the Alma Recorder for the Existing and Future Cumulative Conditions pre- and post-Project.

**Table 7: Capacity Rights Comparison (PWWF)**

| RWQCP Joint Facility | Mountain View Contractual Capacity (MGD) | Pre-Project | | Post-Project | |
|---|---|---|---|---|---|
| | | Existing (MGD) | Future Cumulative (MGD) | Existing (MGD) | Future Cumulative (MGD) |
| Los Altos Trunk | 2.0 | 1.73 | 1.87 | 1.72 | 1.87 |

**Model Results**

The specific affected area of the of gravity system evaluated for the Project impact begins at the Project Site and is collected by two manholes. The first is collected east of the project site along Showers Dr. and continues north until reaching the intersection of Showers Drive and California Street. A portion of the sewer system flow continues north along Showers Drive, west along Sondgroth Way where it then converges with the other flow path at the intersection of Pacchetti Way and Sondgroth Way. The other portion of the sewer flow split at the intersection of California Street and Showers Drive flows westward along California Street where additional flows from the second project collection manhole discharge are added, the flow then proceeds north along Pacchetti Way ultimately converging at the intersection of Pacchetti Way and Sondgroth Way. The combined flows continue westward along Sondgroth Way, north along San Antonio Circle, west along Showers Drive, north along San Antonio Road ultimately flowing through the Alma Recorder, then continuing north along the Los Altos Trunk Main for 1.67 miles before discharging into the Joint Interceptor. The Project sewer conveyance pathway under the future cumulative condition is highlighted in Figure 3.

The project is served by the Los Altos Trunk Main of the sewer system. Sewer capacity is analyzed under Peak Wet Weather Flow (PWWF) and Average Dry Weather Flow (ADWF). PWWF is used to determine hydraulic deficiencies according to the performance criteria in Table 8, and ADWF is used to determine Project flow contribution when determining fair-share allocation for improvement costs. Once pipes are considered deficient, the design criteria outlined in Table 9 shall be used to size the CIP to correct the deficiency. ADWF is used to determine adequacy of wastewater treatment capacity.

**Table 8: Sewer System Performance Criteria**

| Criteria | Entire System |
|---|---|
| Minimum Freeboard in Each Manhole (ft) | 5.0 |

**Table 9: CIP Design Criteria**

| Criteria | Pipe Diameter ≤ 12 inch | Pipe Diameter > 12 inch |
|---|---|---|
| Maximum Flow Depth/Pipe Diameter (d/D) | 0.50 | 0.75 |

The PWWF scenario applies diurnal peaking curves for residential and non-residential flows and simulates system response as rainfall enters the system. The diurnal peaking curves are adopted from the City's 2022 SMP. Groundwater Infiltration (GWI) and rainfall-dependent infiltration (RDI/I) are included but are not peaked. The ADWF scenario is developed in the model by adding BWF and groundwater GWI. GWI is modeled as a constant inflow and includes base infiltration (BI) and pumped groundwater discharged to the sewer system. Since the ADWF scenario models average daily flows, BWF and GWI are not peaked.

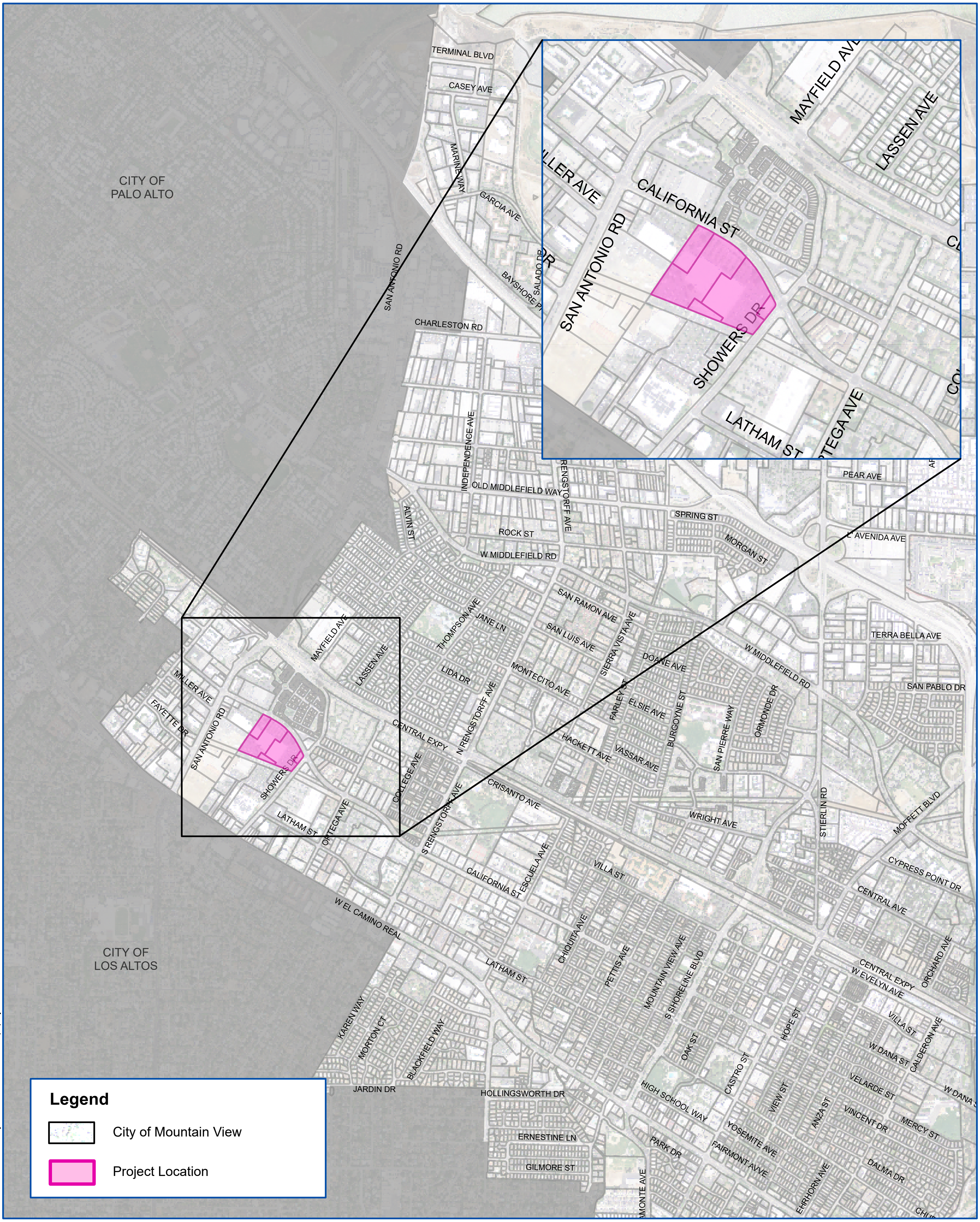
In the existing condition, 3,411 LF of the Project's conveyance path was found to be surcharged however is not considered deficient as the freeboard requirements, listed in Table 8 above, are met. In the existing condition post-Project the Project decreases the total quantity of sewer flow and therefore does not exacerbate existing deficiencies nor generate new deficiencies.

In the future cumulative condition-pre project, 3,881 LF of the projects conveyance path was found to be surcharged. 1,906 LF of the surcharged pipe was due to backwater conditions caused by the downstream capacity deficiencies. In the future cumulative condition – post project the increased Project flow does not generate new deficiencies. All surcharged pipe along the Projects conveyance path, under future cumulative condition - pre and post project, are not considered deficient based on the freeboard requirements listed in Table 8.

There is one CIP, CIP 1, outlined in the 2022 SMP that is within the Project area. The CIP was not included in the analysis based on conversations between the City and Schaaf & Wheeler, since the Project's flow contribution to the pipe segments is minor in nature. The hydraulic impacts and capacity impacts on the sewer system should be studied in depth in the future during the planning and design phase of the City's CIP Project, if it moves forward.

**Project Contribution to Deficiencies**

In the future cumulative condition, the increase of flows due to the Project are 0.2% based on the model. The City has determined contributions of less than 1% fall within the City's error of margin for variability within the model. The Project does not impact the system capacity.

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Schaaf & Wheeler
CONSULTING CIVIL ENGINEERS

0 925 1,850 Feet

N

FIGURE 1:

**Project Location**

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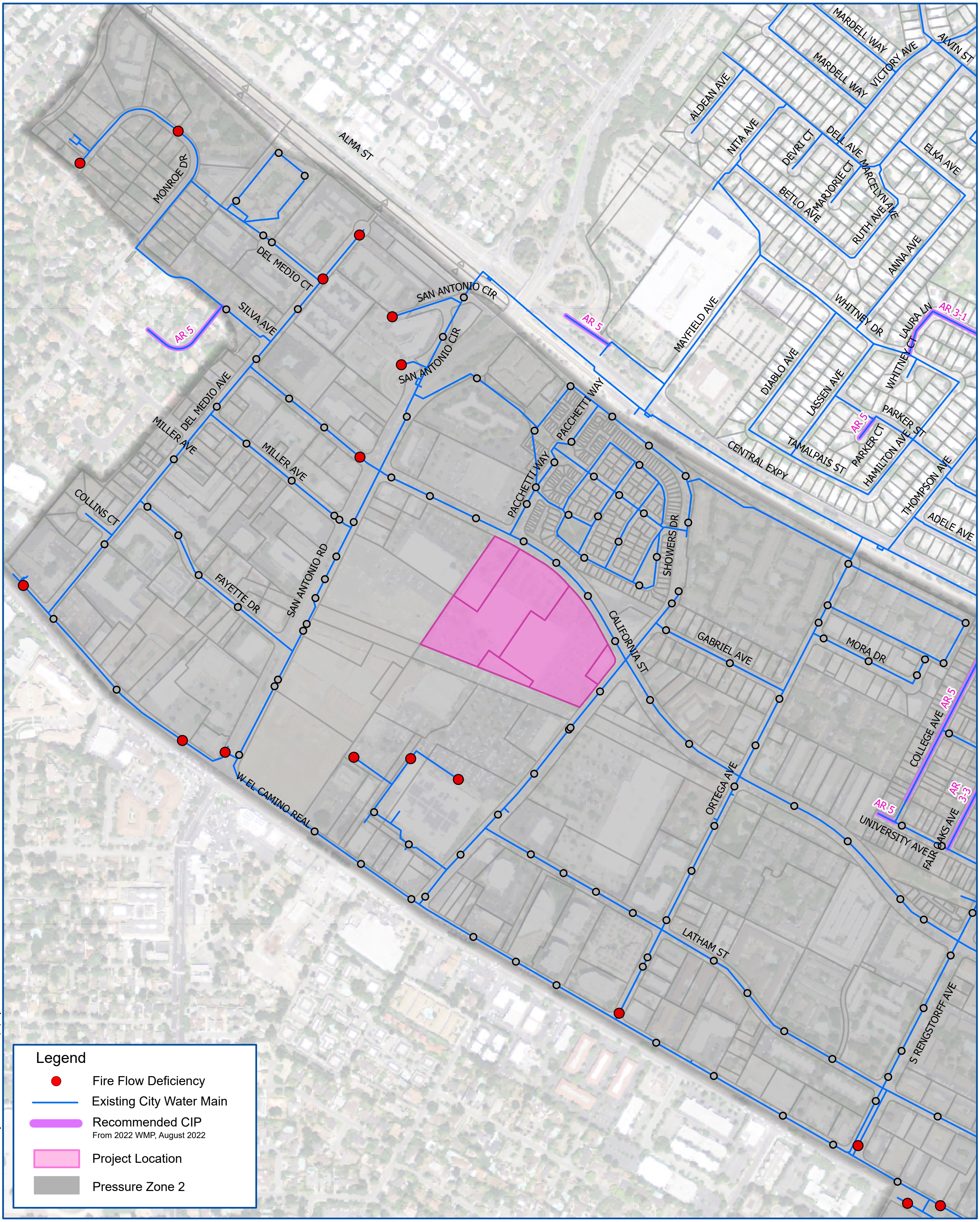


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FIGURE 2:

**Fire Flow Analysis**
**Water System Model**

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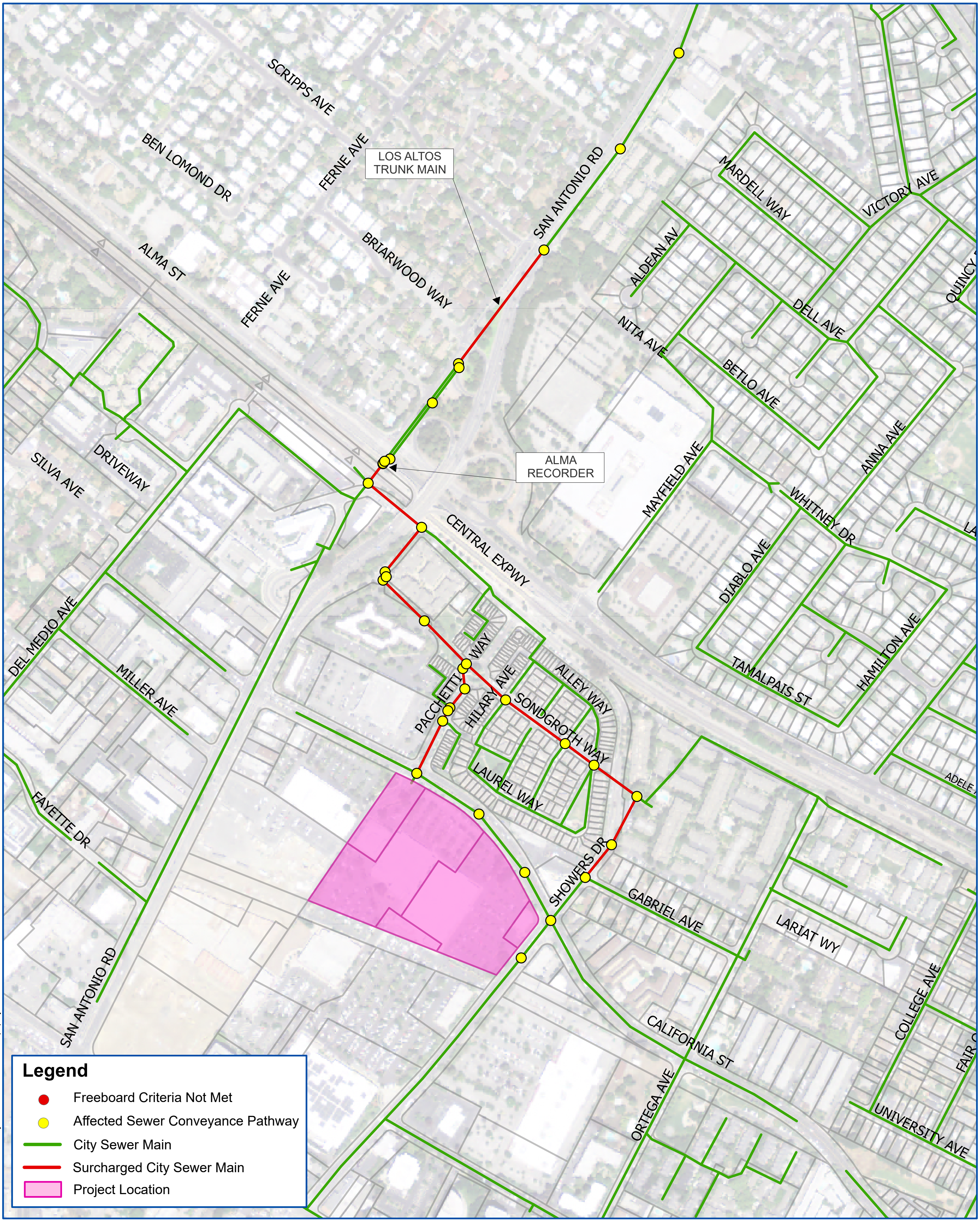


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FIGURE 3:

# Peak Wet Weather Flow

**Sewer System Model**

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