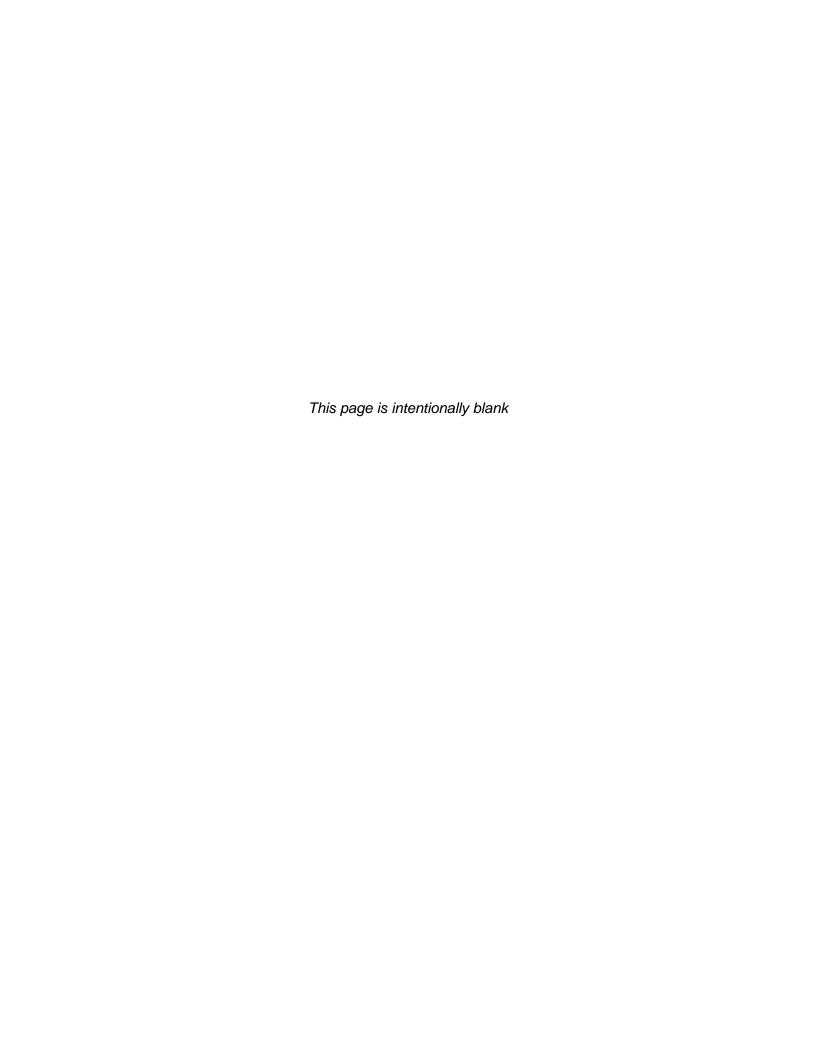
Almaden Country Day School Master Plan Project Focused Initial Study

File Numbers: C19-026 and SP19-023

April 2020





ALMADEN COUNTRY DAY SCHOOL PROJECT Focused Initial Study

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Introduction Page 1

Chapter 1. Introduction and Purpose

1.1 PURPOSE OF THE INITIAL STUDY

The City of San José as the Lead Agency has prepared this Focused Initial Study for the Almaden County Day School Master Plan Project in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City of San José, California.

1.2 PROJECT BACKGROUND AND OVERVIEW

The Almaden Country Day School (ACDS), a private elementary school, leases a closed elementary school site from the San José Unified School District (SJUSD). The existing buildings are aging and no longer adequately serve the ACDS, their students, and programs. ACDS has developed a campus master plan for building improvements and has submitted an application to the City of San Jose for a Conventional Rezoning and Special Use Permit for the continued use and phased renovation of a private elementary school, including new and modified buildings and site improvements, and outdoor uses within 150 feet of residentially-zoned properties on a 9.13 gross acre site.

The project consists of improvements to the existing ACDS, totaling 33,876 square feet in demolition activities and approximately 82,100 square feet in new total buildings, located at 6835 Trinidad Drive in San José. The improvements are outlined in a campus Master Plan and involve the demolition of existing school buildings at the site and redevelopment of the site with new school buildings, adding a new multi-purpose building, and reconfiguring the driveways, drop-off and pick-up zones, and parking lot (Figure 3-2). Implementation of the Master Plan is anticipated to occur in approximately 4 phases over the next 15 years. The intent of the Master Plan is to update and modernize the outdated school facilities, with no proposed plan to increase enrollment or capacity.

The project is located in the Public/Quasi-Public General Plan Designation. In order to conform to the General Plan designation, the site is proposed to be rezoned (Conventional Rezoning) from R-1-5 (Single-Family Residence) to PQP (Public/ Quasi-Public). A Special Use Permit is required for continued use, operation, and renovation of the ACDS through implementation of its Master Plan. This Initial Study (IS) evaluates the environmental Impacts that might reasonably occur as a result of implementation of the proposed project.

Page 2 Introduction This page is intentionally blank.

Project Information Page 3

Chapter 2. Project Information

2.1 Project Title:

Almaden Country Day School Master Plan Project

2.2 Project Applicant and Address:

Olaf Jorgenson Almaden Country Day School 6835 Trinidad Drive San Jose, CA 95120

2.3 Project Location and APNs:

6835 Trinidad Drive San José, CA 95120 APN 701-07-16 See Figure 2-1 Regional Map and Figure 2-2 Location Map.

2.4 Existing General Plan and Zoning District:

The project is located in the Public/Quasi-Public General Plan Designation and is in the R-1-5 (Single-Family Residence) Zoning District.

2.5 Project-Related Approvals, Agreements and Permits:

Conventional Rezoning, Special Use Permit, Grading Permit, Demolition Permit, and Other Public Works Clearances.

2.6 Surrounding Land Uses

North: Open Space, Parklands, and Habitat (Graystone Park)

South: Residential Neighborhood East: Residential Neighborhood West: Residential Neighborhood

2.7 Habitat Plan Designation

Land Cover Designation: Urban-Suburban

Development Area: Urban Development Equal to or Greater than Two Acres

2.8 Lead Agency Contact and Address

Kara Hawkins, Planner I City of San Jose Planning Department 200 East Santa Clara Street, 3rd Floor San Jose, CA 95112 (408)535-7852 Kara.Hawkins@sanjoseca.gov

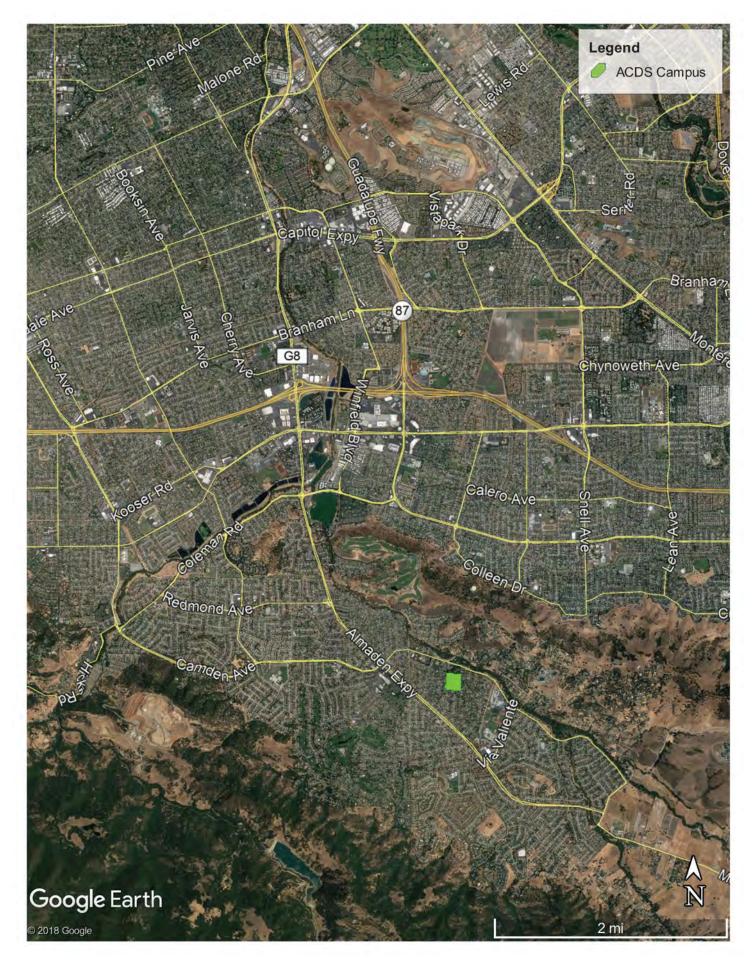


Figure 2-1 Regional Location



Figure 2-2 Project Location

Chapter 3. Project Description

3.1 PROJECT LOCATION

The project is located at 6835 Trinidad Drive in the southwest portion of the City of San José, in Santa Clara County (see Figure 2-1 and 2-2). The campus is located in a residential neighborhood bounded by single family homes along Trinidad Drive to the west, Akio Way to the south, and Winterset Way to the east, and Greystone Park to the north. Regional access to the site is available from State Route 85 via Almaden Expressway.

3.2 SITE DESCRIPTION

The ACDS campus includes approximately 31,000 square feet of permanent buildings and 13,440 square feet of modular buildings on a 9.13-acre site and sits adjacent to the 4.73-acre Henderson Park. The ACDS is currently developed with an elementary school building, multipurpose building, administration building, restroom buildings, and several modular buildings that serve as the middle school, coach offices, pre-kindergarten, locker room, and art, science, library, and computer center (Figure 3-1). Most of these buildings were constructed in 1965-66. The interior of the site contains a large asphalt play area.

Parking for the school is currently provided by a 42-space parking lot (both visitor and staff parking) and by an additional 24 staff parking spaces located along the school's south and east site boundaries (along the school's fire lane), for a total of 66 parking spaces on site. Access to the parking lot is provided via two driveways along Trinidad Drive (a two-way and an outbound only access driveway) and one driveway along Akio Way (inbound only access). The fire lane connects to the school parking lot at the Akio Way driveway. Sidewalks are present along Aiko Way and Trinidad Drive.

3.3 EXISTING GENERAL PLAN DESIGNATION

The project is located in the City's Public/Quasi-Public General Plan Designation which allows public land uses, including schools, colleges, corporation yards, homeless shelters, libraries, fire stations, water treatment facilities, convention centers and auditoriums, museums, governmental offices and airports.

3.4 EXISTING ZONING

The current zoning for the site is R-1-5, which is a residential zoning district with a maximum of 5 dwelling units per acre.

3.5 PROPOSED PROJECT DESCRIPTION

The project consists of site improvements to the existing ACDS, located at 6835 Trinidad Drive in San José. ACDS leases a closed school site from the San José Unified School District (SJUSD) and the buildings are aging and no longer serve the ACDS well. The improvements are outlined in a campus Master Plan and involves removing existing school buildings at the site and redeveloping the site with new school buildings, adding a new multi-purpose building, and reconfiguring the driveways, drop-off and pick-up zones, and parking lot (Figure 3-2). Total demolition under the Master Plan is approximately 33,876 square feet, including portable structures, and total new buildings proposed are approximately 82,100 square feet. The implementation of the Master Plan is anticipated to occur in approximately 4 phases over the next 15 years. The intent of the Master Plan is to update and modernize the outdated school facilities, and not expand enrollment capacity.

The campus renovations as part of the Master Plan are anticipated to occur in four phases. The actual timing of implementation of the various phases is dependent on sufficient funding through fundraising campaigns. The school estimates subsequent phases could occur every 4-5 years based on available funding.

The general descriptions of the phases anticipated in the Master Plan are as follows:

- Phase 1: New multi-purpose gymnasium building with stage, driveway improvements, relocation of existing portables, and additional temporary parking.
- Phase 2: A new middle school building and office, a parking lot and pick-up/drop-off driveway along Trinidad Drive and a southern pick-up/drop-off along Aiko Way.
- Phase 3: A new elementary school building
- Phase 4: A theater and enrichment program building

The plan notes that phases after Phase 1 are tentative and may occur in a different sequence than outlined above and actual timing will depend on how long it takes the school to raise the necessary funds.

3.6 EXISTING SCHOOL OPERATIONS

The ACDS was founded in 1982 on the campus of the former Henderson Elementary School. It serves students from preschool to 8th grade. The school currently has an enrollment of approximately 356 students (preschool through 8th grade, 2019-2020 school year) but has had up to 425 students in recent years, with existing capacity for up to 450 students based on existing square footage. There is no specific cap on enrollment put on the school by SJUSD, however, the ACDS Board has recognized an ideal enrollment of 400 students and will not exceed 425 students. There are 77 current faculty and staff.

The school is in session from 8:00 A.M. to 3:00 P.M., with before care from 7:00 A.M. to 8:00 A.M. and after care from 3:00 P.M. to 6:00 P.M. Approximately 120 students participate in after-school activities (sports and clubs) from 3:15 P.M. to 6:00 P.M. The front office is open from 8:00 A.M. to 4:00 P.M. Sports activities include flag football and girls volleyball in the fall, boys and girls basketball in the winter and track and field in the spring.

The school typically puts on 13 plays (performances) per year. Other annual events include Food Truck Friday, Pumpkin Carving, and ASSETS (art show) event. Most events are held in the evenings from 6:30 P.M. to 8:30 P.M. with a 10:00 P.M. curfew. Certain events would continue to be exceptions to the 10:00 P.M. curfew, extending later into the evening (Dinner Auction, Bingo Night), but not past 12:00 midnight. Operations during and after the Master Plan implementation are proposed to remain the same as existing.

3.7 PROJECT CONSTRUCTION

The proposed project would involve construction activities that would occur intermittently in phases over the next approximately 15 years.

Phase 1 (Figure 3-3) would remove portables and buildings on the southeast side of the campus. The portables would be relocated to the north side of the campus. A new approximately 15,000 square foot, single-story multipurpose building, containing a gym floor/multipurpose room, a stage, and locker rooms/restrooms would be constructed in their place.

The existing school parking lot along Trinidad Drive would remain unchanged under this phase; however, the existing inbound access driveway along Akio Way would be closed off during the school's drop-off/pick-up times, and access to the drop-off area would be provided via a new driveway along Akio Way, at the southeast corner of the school site. The new driveway would connect to the existing fire lane that runs along the site's southern and eastern boundaries, providing access to both the drop-off area and the parking spaces located along the eastern fire lane. An additional 10 parking spaces also are being proposed along the fire lane and one additional space within the parking lot under this development phase, for a total of 77 parking spaces provided within the school site (43 within the parking lot and 34 along the fire lane). Phase 1 also includes installing upgraded service connections for gas and electric utilities, however off-site utility improvements are not anticipated.

Although the timing and sequencing of Phases 2 through 4 are tentative at this point, it is envisioned that Phase 2 would involve replacing the corner parking lot at Trinidad and Akio Way with a new, two-story middle school and administration building totaling approximately 23,256 square feet. Following the development of the new middle school classrooms and administration building, the existing middle school portable classrooms would be removed from the site, making room for a new, approximately 65 space parking lot in the southeastern portion of the campus. An 8-foot high masonry or concrete wall would be constructed along the eastern property boundary along the length of the new parking lot prior to the start of Phase 2 construction activities. During development of the parking lot, driveways along Trinidad Drive and Akio Way would be constructed and reconfigured, respectively, so there would be two, distinct pick-up and drop-off locations. The newly constructed driveway along Trinidad Drive would include approximately 17 parking spaces.

Phase 3 would involve the deconstruction of the existing multipurpose building, administration building, and restroom building to accommodate a new, approximately 21,640 square foot elementary school classroom building. The multipurpose and administration functions are replaced in Phases 1 and 2, therefore, no students or classrooms would be displaced during construction.

Phase 4 would include, in the following order, the:

- Renovation of the previously vacated, former elementary school building,
- Demolition of the existing, science/art/library/computer rooms, and
- Construction of a new approximately 12,600 square foot enrichment building and approximately 5,935 square foot theater/auditorium building.

This proposed phasing avoids displacing student functions during construction. The new theater is the only "new" building use proposed as part of this master plan. All other buildings constructed as part of Phases 1-4 replace existing classrooms and functions already on campus.

ACDS anticipates construction activities associated with Phase 1 would begin in the summer of 2020 when school is in recess for summer break. Construction activities associated with Phase 1 are anticipated to last approximately 12 to 15 months. It is assumed construction activities associated with Phases 2 through 4 would also take approximately 12 to 15 months for their respective site improvements.

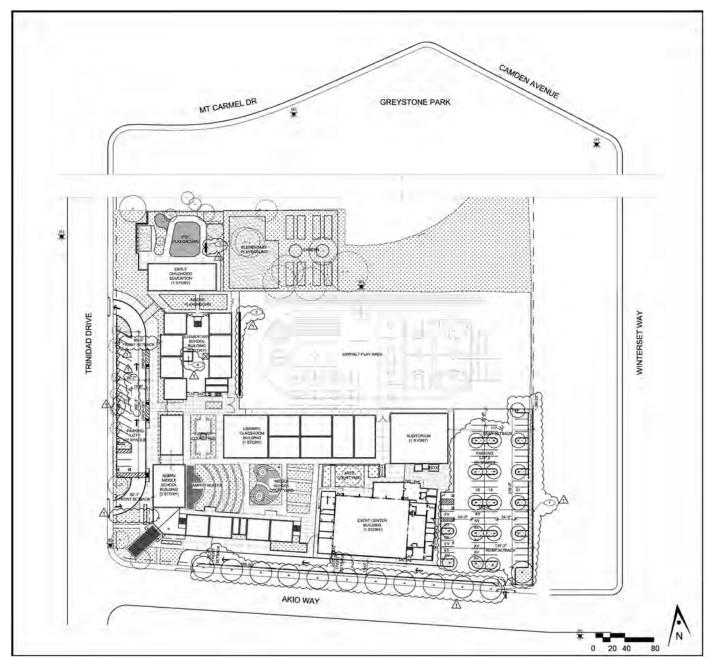
As noted above, the master plan redevelopment would be implemented over a period of 15 years. Each phase would include the following general sequence of events:

- Schematic Design
- Design Development
- Construction Documents
- DSA Review and Approval
- Bidding/Contracting
- Construction

Student safety is the utmost priority during the master plan implementation. Each construction phase includes the preparation of temporary control plans to manage student access, contractor operations and material deliveries, as well as staff and faculty parking.



Figure 3-1 Existing Campus Site Plan



Source: Artik Art & Architecture 2020; MIG 2020

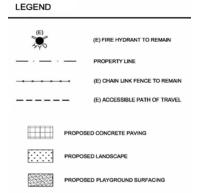
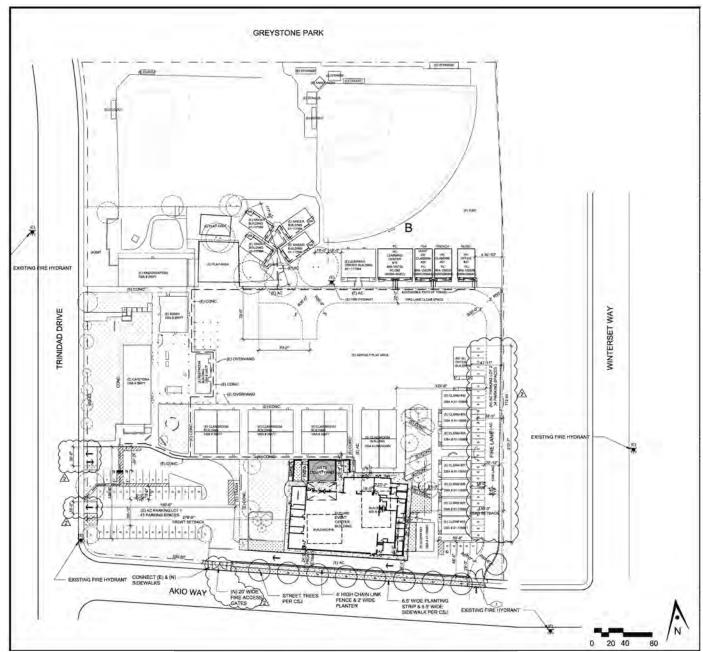
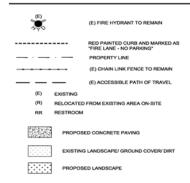


Figure 3-2 Proposed Campus Site Plan (Full build-out)



Source: Artik Art & Architecture 2020; MIG 2020

LEGEND



3.8 PROPOSED SCHOOL OPERATIONS

Typical school operations would not change as a result of the planned Master Plan redevelopment of the campus. The improvements do not provide for any increase in enrollment. Enrollment records show the school's enrollment varied from a high of 425 to a low of 335 over the past 12 years (2008-2020). Staffing has steadily increased over time starting at 59 in 2008 and increasing to 77 in 2020.

The new multipurpose building will allow the school to bring existing school sports and activities indoors (reduce black top use). The master plan notes school events have the highest priority for multipurpose building use but does acknowledge the potential to host community group events. For any activities taking place in the multipurpose building, including all school-sponsored and community-organized events, hours of use will fall typically between 7:00 a.m. - 10:00 p.m. Monday through Saturday and 8:00 a.m. - 8:00 p.m. Sunday. Certain all-school events such as the Dinner Auction and Bingo Night will take place in the multipurpose building and would continue to be exceptions to the 10:00 p.m. curfew, extending until as late as 12:00 a.m. ACDS will continue to announce these events in advance to neighbors whose homes border the campus, along with messaging any other unanticipated exceptions to the hours of use.

3.9 BEST MANAGEMENT PRACTICES AND STANDARD PROJECT CONDITIONS

The following Best Management Practices (BMPs) will be incorporated into the planning, design, and construction of each phase of the proposed project to minimize the potential adverse effects of the project on the environment. The BMPs included here are either considered Standard Project Conditions that apply to all projects permitted in the City or measures the applicant has agreed to implement as part of the project. As such, these measures are considered part of the project. The City will incorporate these measures into the project's Conditions of Approval and the Applicant will include these measures on all construction documents.

Air Quality. The Applicant's contractor shall implement the following Bay Area Air Quality Management District (BAAQMD) Basic Construction Emission Control Measures during project construction:

- 1) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day, or as needed.
- 2) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 3) 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, or as often as deemed necessary by the client/inspector, or to the satisfaction of the City's department of public works. The use of dry power sweeping is prohibited.
- 4) 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.
- 5) 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 the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

6) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specification. All equipment shall be checked by a certified visible emissions evaluator.

7) Post a publicly visible sign with the telephone number and person to contact at the City or contractor regarding dust complaints. The City or contractor shall respond and take corrective action within 48 hours. The publicly visible sign shall also include the contact phone number for the BAAQMD to ensure compliance with applicable regulations.

Nesting Bird Surveys. To avoid impacts to nesting birds and violation of state and federal laws pertaining to birds, all construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (generally prior to February 1 or after August 31). If construction and construction noise occurs within the avian nesting season (from February 1 to August 31 or according to local requirements), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot buffer (passerines), 500-foot buffer (small raptors, such as accipiters), and 1,000-foot buffer (large raptors, such as buteos) around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than five days before commencement of any site disturbance activities and equipment mobilization. The bird survey buffer radius may be modified in consultation with CDFW. If project activities are delayed by more than five days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of the surveys shall be documented. If it is determined that birds are actively nesting within the survey area, the additional BMP Measure described below shall apply. Conversely, if the survey area is found to be absent of nesting birds, the BMP Measure described below shall not be required.

If pre-construction nesting bird surveys result in the location of active nests, no site disturbance or mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), shall take place within 250 feet of non-raptor nests, 500-feet of small raptor nests, and 1,000 feet of large raptor nests, or as determined by a qualified biologist in consultation with CDFW, until the chicks have fledged. Monitoring shall be required to ensure compliance with the Migratory Bird Treaty Act and relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented.

Santa Clara Valley Habitat Conservation Plan (HCP) Conditions. The project is subject to applicable HCP conditions and fees prior to issuance of any grading permit. The project applicant shall submit a Santa Clara Valley Habitat Plan Coverage Screening Form to the Director of Planning, Building, and Code Enforcement or Director's designee for review and will complete subsequent forms, reports, and or studies as needed.

Cultural Resources and Tribal Cultural Resources. If prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped, the Director of Planning, Building and Code Enforcement (PBCE) or the Director's designee and the City's Historic Preservation Officer shall be notified, and a qualified archaeologist shall examine the find. The archaeologist shall 1) evaluate the find(s) to determine if they meet the definition of a historical or archaeological resource; and (2) make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits. Recommendations could include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery shall be submitted to Director of PBCE or the Director's designee and the City's Historic Preservation

Officer and the Northwest Information Center (if applicable). Project personnel shall not collect or move any cultural materials.

If any human remains are found during any field investigations, grading, or other construction activities, all provisions of California Health and Safety Code Sections 7054 and 7050.5 and Public Resources Code Sections 5097.9 through 5097.99, as amended per Assembly Bill 2641, shall be followed. If human remains are discovered during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The project applicant shall immediately notify the Director of Planning, Building and Code Enforcement (PBCE) or the Director's designee and the qualified archaeologist, who shall then notify the Santa Clara County Coroner. The Coroner will make a determination as to whether the remains are Native American. If the remains are believed to be Native American, the Coroner will contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then designate a Most Likely Descendant (MLD). The MLD will inspect the remains and make a recommendation on the treatment of the remains and associated artifacts. If one of the following conditions occurs, the landowner or his authorized representative shall work with the Coroner to reinter the Native American human remains and associated grave goods with appropriate dignity in a location not subject to further subsurface disturbance:

- The NAHC is unable to identify a MLD or the MLD failed to make a recommendation within 48 hours after being given access to the site.
- The MLD identified fails to make a recommendation; or
- The landowner or his authorized representative rejects the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner.

Geology and Soils

- To avoid or minimize potential damage from seismic shaking, the project shall be constructed using standard engineering and seismic safety design techniques. Building design and construction at the site shall be completed in conformance with the recommendations of an approved geotechnical investigation. The report shall be reviewed and approved by the DSA as part of their building plan review process. The buildings shall meet the requirements of applicable Building and Fire Codes as adopted or updated by the City. The project shall be designed to withstand soil hazards identified on the site and the project shall be designed to reduce the risk to life or property on site and off site to the extent feasible and in compliance with the Building Code.
- All excavation and grading work shall be scheduled in dry weather months or construction sites shall be weatherized.
- Stockpiles and excavated soils shall be covered with secured tarps or plastic sheeting.
- Ditches shall be installed to divert runoff around excavations and graded areas if necessary.
- The project shall be constructed in accordance with the standard engineering practices in the California Building Code, as adopted by the City of San José. A grading permit from the San José Department of Public Works shall be obtained prior to the issuance of a Public Works clearance. These standard practices would ensure that the future building on the site is designed to properly account for soils-related hazards on the site.
- Paleontological Resources. If vertebrate fossils are discovered during construction, all work on the site shall stop immediately, Director of Planning or Director's designee of the

Department of Planning, Building and Code Enforcement (PBCE) shall be notified, and a qualified professional paleontologist shall assess the nature and importance of the find and recommend appropriate treatment. Treatment may include, but is not limited to, preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. The project applicant shall be responsible for implementing the recommendations of the qualified paleontologist. A report of all findings shall be submitted to the Director of Planning or Director's designee of the PBCE.

Hazardous Materials – The project shall adhere to the recommendations of the Phase I Environmental Site Assessment prepared by Cornerstone Earth group on May 8, 2018 that are already incorporated as part of the project prior to the issuance of any grading or ground disturbing activities

Asbestos and Lead-Based Paint - In conformance with State and local laws, a visual inspection/pre-demolition survey, and possible sampling, shall be conducted prior to the demolition of on-site building(s) to determine the presence of asbestos-containing materials (ACMs) and/or lead-based paint (LBP).

- During demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Title 8, California Code of Regulations (CCR), Section 1532.1, including employee training, employee air monitoring, and dust control. Any debris or soil containing lead-based paint or coatings shall be disposed of at landfills that meet acceptance criteria for the type of lead being disposed.
- All potentially friable asbestos containing materials (ACMs) shall be removed in accordance with National Emission Standards for Air Pollution (NESHAP) guidelines prior to demolition or renovation activities that may disturb ACMs. All demolition activities shall be undertaken in accordance with Cal/OSHA standards contained in Title 8, CCR, Section 1529, to protect workers from asbestos exposure.
- A registered asbestos abatement contractor shall be retained to remove and dispose of ACMs identified in the asbestos survey performed for the site in accordance with the standards stated above.
- Materials containing more than one-percent asbestos are also subject to Bay Area Air Quality Management District (BAAQMD) regulations. Removal of materials containing more than one-percent asbestos shall be completed in accordance with BAAQMD requirements and notifications.
- Based on Cal/OSHA rules and regulations, the following conditions are required to limit impacts to construction workers.
- Prior to commencement of demolition activities, a building survey, including sampling and testing, shall be completed to identify and quantify building materials containing lead-based paint.
- During demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Construction Standard, Title 8, CCR, Section 1532.1, including employee training, employee air monitoring and dust control.
- Any debris or soil containing lead-based paint or coatings shall be disposed of at landfills that meet acceptance criteria for the type of waste being disposed.

Termite Control Pesticides – Shallow soil at current and former building locations shall be tested for residual lead and pesticides. Proper remediation and handling according to

Occupational Safety and Health Administration (OSHA) regulations shall be followed including requirements including but not limited to worker training and air monitoring and dust control, if found.

Naturally Occurring Asbestos (NOA) – Sampling for NOA shall be conducted at the site prior to ground-disturbing activities. If present, ACDS and its contractors shall follow all applicable handling and dust control requirements as required by the Bay Area Air Quality Management District (BAAQMD) Rule 11-14 for Asbestos-Containing Serpentine.

Hydrology

- Burlap bags filled with drain rock shall be installed around storm drains to route sediment and other debris away from the drains.
- Earthmoving or other dust-producing activities shall be suspended during periods of high winds.
- All exposed or disturbed soil surfaces shall be watered at least twice daily to control dust as necessary.
- Stockpiles of soil or other materials that can be blown by the wind shall be watered or covered.
- All trucks hauling soil, sand, and other loose materials shall be covered and all trucks shall maintain at least two feet of freeboard.
- All paved access roads, parking areas, staging areas and residential streets adjacent to the construction sites shall be swept daily (with water sweepers).
- Vegetation in disturbed areas shall be replanted as quickly as possible.
- All unpaved entrances to the site shall be filled with rock to remove mud from tires prior to entering City streets. A tire wash system shall be installed if requested by the City.
- The project applicant shall comply with the City of San José Grading Ordinance, including implementing erosion and dust control during site preparation and with the City of San José Zoning Ordinance requirements for keeping adjacent streets free of dirt and mud during construction.

Construction Noise Logistics Plan - Consistent with City of San Jose General Plan Policy EC-1.7, the ACDS and/or its designated contractor shall prepare a Construction Noise Logistics Plan (CNLP) prior to the start of any construction activities for each Phase associated with the ACDS Campus Master Plan, as is included in the project description. The CNLP shall apply to all phases of master plan development and shall:

- Designate an ACDS employee and/or contractor's representative to serve as a noise disturbance coordinator responsible for receiving noise complaints and resolving construction-noise related issues.
- Include procedures describing how the noise disturbance coordinator will receive, respond to, and resolve construction noise complaints. At a minimum, upon receipt of a noise complaint, the Contractor and/or ACDS representative described in the first subbullet above shall identify the noise source generating the complaint, determine the cause of the complaint, and take steps to resolve the complaint.
- Restrict construction work hours to the hours specified in City of San Jose Municipal Code Section 20.11.450 (7:00 AM to 7:00 PM, Monday through Friday).

• Require construction staging areas to be established in locations that create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project sure during all project construction.

- Provide notice (at least 10 days prior to the start of construction activities) to all adjacent residences that describes the approximate start date and schedule for the construction activities and a contact name and phone number for the construction contractor and/or ACDS staff person responsible for handling construction-related noise complaints. The notice shall also identify periods of peak construction activities and noise levels (e.g., grading activities, foundation work, etc.).
- Specify the noise and vibration minimization measures that will be undertaken during the
 construction phase to reduce construction-related noise levels. Such measures may
 include but are not limited to: o Equipping all internal combustion engine-drive
 equipment with intake and exhaust mufflers that are in good condition and appropriate
 for the equipment being controlled.
- Prohibiting unnecessary idling of internal combustion engines (i.e., idling should generally be limited to no more than five minutes).
- Using hydraulically or electrically powered impact tools (e.g., jack hammer) to avoid noise associated with compressed air exhaust from pneumatically powered tools, if feasible.
- Reducing noise from pneumatic tools through the use of a noise suppression device on the compressed air exhaust.
- Connecting to existing electrical service at the site to avoid the use of stationary, dieselor other alternatively-fueled power generators.
- Locating stationary noise-generating equipment such as pumps, compressors, and
 welding machines as far from sensitive receptor locations as practical. If such equipment
 must be located near receptors, provide shielding in the form of a three-sided sound
 enclosure (with a full or partial roof) that provides for proper ventilation, equipment
 operation, and effective noise control.
- Phasing demolition and construction activities to take advantage of noise shielding provided by existing structures (i.e., start from the side of the building the farthest away from nearby sensitive receptors).
- Prohibiting noise from radios or other amplified sound devices to be audible beyond the property line of the construction site.

Concrete Barrier for Southeastern Parking Lot - Prior to any construction activities associated with Phase 2 of the Campus Master Plan, the ACDS shall install a permanent, six-foot concrete barrier along the entire portion of the proposed Project's southeastern parking lot, as is shown on the final site planThe barrier shall be constructed free of openings or gaps and have a minimum rated transmission loss value of 25 dBA (or higher). The design of this barrier would reduce noise levels between the southeastern parking lot and the residential property line by 15 dBA (or more).

Traffic Control Plan – Prior to each construction phase, a Traffic Control Plan shall be developed by ACDS and or its contractors to establish hours of operation (construction), pedestrian and vehicular safety during peak arrival and departure times, manage contractor parking, staging areas, and materials delivery to minimize impacts on school operations and the surrounding community.

Chapter 4. Environmental Impact Analysis

This section describes the existing environmental conditions on and near the project area, as well as environmental impacts associated with the proposed project. The environmental checklist, as recommended in the California Environmental Quality Act (CEQA) Guidelines, identifies environmental impacts that could occur if the proposed project is implemented.

4.1 **AESTHETICS**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
Would the project:*					
a) Have a substantial adverse effect on a scenic vista?				\boxtimes	
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 of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?					
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?					
e) Increase the amount of shading on public open space (e.g. parks, plazas, and/or school yards)					
*Except as provided in Public Resources Code Section 21099					

Environmental Setting

The ACDS campus includes approximately 31,000 square feet of permanent buildings and 13,440 square feet of modular buildings as well as, playground, black top, and open grass field play areas, landscaping, site walkways and parking areas. It is located in a residential neighborhood surrounded to the west, south, and east by single-family homes and to the north is Greystone Park. See Figure 2-2 for an aerial of the site and surrounding development.

The existing buildings are generally set back from the site's surrounding roadways, Trinidad Drive and Aiko Way. A four-foot high chain link fencing and a mix of shrub and tree plantings extends along the southeastern portion of the site along Aiko Way and generally block views to the campus in this area. Generally open views to the site are available near the campus' southwestern corner at the intersection of Aiko Way and Trinidad Drive where the campus' existing parking lot is located.

A series of seven mature landscaping trees are located in the grassy frontage along Trinidad Drive and the campus' existing administration building. The interior portions of the site containing the black top playground area is not visible from the surrounding streets. Views to the campus from the north are likely visible from within Greystone park. A small portion of Trinidad Drive allows views to the buildings in the norther portion of the developed campus.

Phase 1 construction activities would entail relocating the existing, single-story portable classrooms located along the school's southern boundary to the north side of the campus. In their place, a new approximately 15,000 square foot, single-story multipurpose building would be constructed. The new structure would have a maximum height of 31-feet, 4-inches, and therefore conforms to the maximum height restriction of 65 feet per Municipal Code Part 3 of Chapter 20.40 which contains the development standard for the proposed PQP zoning.

Current zoning for the site is R-1-5, which is a residential zoning district with a maximum of 5 dwelling units per acre. The R-1-5 zoning also has a 35-foot building height limit, which would not be exceeded for any phase of the Master Plan implementation. Full implementation of the Master Plan would concentrate the campus buildings along Aiko Way and Trinidad Drive, and away from the shared property line for those homes on Winterset Way.

The existing school parking lot along Trinidad Drive would remain unchanged under this phase; however, the existing inbound access driveway along Akio Way would be closed off during the school's drop-off/pick-up times, and access to the drop-off area would be provided via a new driveway along Akio Way, at the southeast corner of the school site. The new driveway would connect to the existing fire lane that runs along the site's southern and eastern boundaries, providing access to both the drop-off area and the parking spaces located along the eastern fire lane.

Regulatory Setting

Municipal Code

The City's Municipal Code includes several regulations associated with protection of the City's visual character and control of light and glare. For example, Chapter 13.32 (Tree Removal Controls) regulates the removal of trees on private property within the City, in part to promote scenic beauty of the city.

Several sections of the Municipal Code include controls for lighting of signs and development adjacent to residential properties. These requirements call for floodlighting to have no glare and lighting facilities to be reflected away from residential use so that there will be no glare. The City's Zoning Ordinance (Title 20 of the Municipal Code) includes design standards, maximum building height, and setback requirements.

San Jose Outdoor Lighting Policy

The San José Council approved Council Policy 4-3 on March 1, 1983, and later revised on June 20, 2000, for outdoor lighting on private developments. The policy includes the use of low-pressure sodium lights, downward directed light, shielding, and lumen limits to promote energy-efficient outdoor lighting and reduces light pollution and sky glow during the night.

Envision San Jose 2040 General Plan

The General Plan includes Community Design goals, policies, and implementation actions that guide the form of future development in the city of San José and help tie individual projects to the vision for the surrounding area and city as a whole.

Findings

- **a) No Impact.** The project site is located in an urbanized, residential area in southwestern San José and would not impact any scenic vistas.
- **b) No Impact.** The project site is not located within view of a State-designated scenic route or highway. Additionally, the project's tree removals would be consistent with the City's tree replacement ratios.
- c) No Impact. The proposed project would demolish existing structures on the ACDS site and replace them with new structures and allow the continued operation of an existing private school. The new structures would be subject to applicable setback and height restrictions and the City's design review process to ensure neighborhood compatibility. The proposed height of the new multipurpose building of 31 feet and 4-inches conforms to the site's current R-1-5 zoning height restriction (35 feet) and proposed PQP zoning height restriction (65 feet). None of the buildings envisioned in the master plan would exceed the site's current zoning height restriction which is more restrictive than what would be allowed under the proposed conventional rezoning to the PQP zone.
- d) Less than Significant Impact. The proposed project includes exterior building and parking lot lighting. Phase 1 lighting incudes Sentinall exterior wall mounted fixtures (model S711D series) on the outside of the building. It has an 18-guage cold rolled steel baseplate with UV-stabilized, injection molded polycarbonate lens. The lamp in the fixture is a 16-watt 4000K LED. A photometric survey prepared for Phase 1 shows that Phase 1 lighting would not spill off-site. All current and future proposed lighting are required to conform to the established policies as listed in the City's Outdoor Lighting Policy 4-3, and Municipal Code Section 20.90.160 that requires lighting associated with off-street vehicle parking to be arranged and shielded so that light is reflected away from residential properties to avoid glare and annoyance of adjacent residential properties.
- e) Less than Significant Impact. Most of the proposed project's new buildings will be concentrated along the southern and western portions of the site. The site borders Greystone Park to the north. The only proposed project improvements along this side of the campus includes the relocation of four portable classroom buildings (temporary until the classroom building/s are built). The portable classroom buildings are one-story in height and not expected to appreciably change the amount of shading in the existing baseball outfield. The nearest proposed portable classroom is approximately 20 feet from the outfield fence line.

4.2 AGRICULTURAL AND FOREST RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project*:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				\boxtimes
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?				\boxtimes
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				\boxtimes
d) Result in the loss of forest land or conversion of forest land to non-forest use?				\boxtimes
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				
*In determining whether impacts to agricultural ragencies may refer to the California Agricultural prepared by the California Dept. of Conservation agriculture and farmland. In determining whethe significant environmental effects, lead agencies Department of Forestry and Fire Protection regarders and Range Assessment Project and the	Land Evaluation as an optional or impacts to for may refer to informing the state'	on and Site Assessn I model to use in as est resources, inclu formation compiled s inventory of forest	nent Model (199 sessing impacts ding timberland by the California land, including	97) s on , are a the

Findings

a) through e), No Impact. No agricultural or forestry resources are on the project site. The site is already developed with a school and is surrounded by development including residential uses and a neighborhood park.

measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

4.3 **AIR QUALITY**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project*:				
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 non-attainment under an applicable federal or state ambient air quality standard?				
c) Expose sensitive receptors to substantial pollutant concentrations?				
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				
*Where available, the significance criteria established by the applicable air quality management district or air				

pollution control district may be relied upon to make the following determinations.

Environmental Setting

The project site is located within the San Francisco Bay Area Air Basin (SFBAAB). The SFBAAB is a California Air Resources Board (CARB) defined management area covering all of Alameda, Contra Costa, Marin Napa, Santa Clara, San Mateo, and San Francisco counties, and portions of Solano and Sonoma County. The topography and meteorology of the SFBAAB are characterized by the coast mountain ranges and the seasonal migration of the Pacific highpressure cell. The City of San José is in the southern portion of the SFBAAB, within the Santa Clara Valley. Wind patterns in the Santa Clara Valley are influenced by terrain, resulting in a prevailing wind flow that is generally parallel to the valley's northwest-southeast orientation. During the daytime, winds generally flow from the ocean into the Bay Area and southward into the Santa Clara Valley, while at night winds generally flow northward out of the valley (BAAQMD 2017).

The Bay Area Air Quality Management District (BAAQMD) is primarily responsible for assuring that the national and State ambient air quality standards are attained and maintained in the Bay Area. The BAAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, as well as many other activities. The BAAQMD has jurisdiction over much of the nine-county Bay Area, including Santa Clara County.

The project site is located in an urban developed area, with single family homes and a local public park which adjoin the site. Then existing school has been in use at the site since 1982. There are no stationary sources of air emissions on the project site or within the immediate vicinity.

Findings

- a) Less than Significant Impact. Chapter 5 of the 2017 Clean Air Plan contains the Bay Area Air Quality Management District's (BAAQMD) strategy for achieving the plan's climate and air quality goals to reduce greenhouse gas (GHG) emissions across the full range of economic sectors. The plan identifies 85 distinct control measures designed to reduce ozone precursors, particulate matter, and toxic air contaminants. Of the nine economic sectors, only three contain control strategies that are relevant to the proposed project. As stated in the project description, the Applicant and its contractors shall implement BAAQMD's recommended fugitive dust control measures to abate dust during construction. The school actively encourages carpooling and other trip reduction measures and will incorporate bicycle racks or bicycle storage areas into project design. The buildings constructed as part of the Master Plan would be designed to the current California Building Code standards, including Part 11 California Green Building Standards applicable at the time the buildings are designed and require approval by the California Division of the State Architect. The project also includes replacement landscaping, including trees, which help to off-set urban heat island effect. The project supports the primary goals of the Clean Air Plan in that it does not exceed the BAAQMD thresholds for operational air pollutant emissions and is infill development that provides users of the site with access to bicycle facilities and transit (which will reduce vehicle trips). It also incorporates energy efficiency measures as a part of project design.
- b) and c) Less than Significant Impact. No significant changes to operational emissions are anticipated as the school has been in operation at the site since 1982 and no changes to historical enrollment are proposed as part of the Master Plan, therefore the project would have a less than significant impact from operational emissions. The project would generate short term construction emissions during each phase of construction of the master plan.

Implementation of the Master Plan is considered in-fill development on an existing developed site. The Master Plan includes demolition of various on-site buildings, and replacement construction of approximately 77,000 square feet of total building area in several phases over the next approximately 15 years.

Construction of the entire Master Plan falls well below the screening threshold criteria of 277,000 square feet for construction related emissions for elementary/junior high school land use types. As stated in the project description, The Applicant will include all these construction BMPs on all project-related bid, contract, engineering, and site plan documents (e.g., construction drawings). In addition, current and future development permits associated with the master plan development will include these BMPs incorporated into the project as standard project conditions to ensure implementation. The project, therefore, would result in a less than significant air quality impact from construction emissions.

The Applicant's contractor shall implement the following Bay Area Air Quality Management District (BAAQMD) Basic Construction Emission Control Measures during project construction:

- 1) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day, or as needed.
- 2) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 3) 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, or as often as deemed necessary by the client/inspector, or to the satisfaction of the City's department of public works. The use of dry power sweeping is prohibited.

- 4) 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.
- 5) 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 the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- 6) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specification. All equipment shall be checked by a certified visible emissions evaluator.
- 7) Post a publicly visible sign with the telephone number and person to contact at the City or contractor regarding dust complaints. The City or contractor shall respond and take corrective action within 48 hours. The publicly visible sign shall also include the contact phone number for the BAAQMD to ensure compliance with applicable regulations.
- d) Less than Significant Impact. The proposed project would replace old school structures with new school buildings and modify the site's existing parking and driveway access. The project does not change the existing land use at the site and does not involve activities with pollutant emissions or odors that would affect a substantial number of people.

4.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
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?				
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?				

Environmental Setting

The project proposes redevelopment of an existing school site within an urban developed area in southwestern San José. Vegetation on the site is limited to landscaping vegetation including grass and 25 trees in the vicinity of the Phase I Master Plan improvements. There are no heritage trees on site. The nearest heritage tree is located at 6824 Trinidad Drive, approximately 200 feet south of the intersection of Aiko Way and Trinidad Drive, and is outside of the project footprint.

A total of 12 trees would be removed by Phase 1 of the project. Four are considered ordinance sized trees (those that measure 38-inches or more in circumference at 4 ½ feet above grade), and one is native. The largest tree to be removed is a 98-inch circumference Monterey pine tree. Most are small non-native landscaping trees as described in the Table 4-1, below.

Table 4-1. Trees Removed

Tree Number	Circumference (inches)	Ordinance Sized (over 38")	Species	Native Species
1	98	Yes	Pinus radiata (Monterey pine)	Yes
2	23.5	No	Geijera parviflora (Australian willow)	No
3	13	No	Ligustrum lucidum (privet)	No
4	67.5	Yes	Geijera parviflora (Australian willow)	No
5	75	Yes	Geijera parviflora (Australian willow)	No
7	63.5	Yes	Morus alba (white mulberry)	No
8	29.5	No	Corylus sp. (hazelnut)	No
9	27	No	Prunus sp. (plum)	No
10	27, 19.5 (multi-	No	Pyrus calleryana (Callery pear)	No
	stem)			
11	35	No	Pyrus calleryana (Callery pear)	No
12	8.5	No	Pyrus calleryana (Callery pear)	No
13	26	No	Pyrus calleryana (Callery pear)	No

Phase 1 of the project includes the plantings of nine, 36-inch box size California sycamore trees located in a planter strip along Aiko Way as well as one 24-inch box size western redbud on the interior of the site just north of the proposed multi-purpose building.

Additional plantings include various shrubs including Arctostaphylos uva-ursi 'Point Reyes' (bearberry), Cistus x purpureus (orchid rockrose), Coleonema pulchellum 'Sunset gold' (pink breath of heaven), Dietes vegeta (fortnight lily), Loropetalum chinensis 'purple magesty' (Chinese fringe flower), Muhlenbergia capillaris (pink mulhey), Phormimum 'maori maiden', Phormimum tenax 'tony tiger', Phormimum 'yellow wave' (New Zealand flax), Pittosporum tobira 'varigata' (variegated mock orange), Rosmarinus officinalis 'tuscan blue' (upright rosemary), Salvia leuchantha (Mexican bush sage), and Zauschneria californica (California fuscia). Bioretention shrub plantings include ceanothus griseus horizontalis (creeping lilac), carex divulsa (Berkeley sedge), Juncus patens (California grey rush), mimulus cardinalis (scarlet monkeyflower), and mulhenbergia rigens (deer grass).

The project site may provide habitat for wildlife species associated with urban areas. Landscaped areas may provide food and cover for wildlife adapted to this environment, including birds such as house finch, mourning dove, house sparrow, and Brewer's blackbird. Urban landscape areas may also provide habitat for small mammals such as mice. The project site has, in general, a low value for wildlife, due to the disturbed nature and active use of the property and limited natural habitat.

Regulatory Setting

Santa Clara Valley Habitat Plan

The Santa Clara Valley Habitat Conservation Plan (HCP) was developed through a partnership between Santa Clara County, the Cities of San José, Morgan Hill, and Gilroy, Santa Clara Valley Water District (SCVWD), Santa Clara Valley Transportation Authority (VTA), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Wildlife (CDFW). The HCP is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in approximately 500,000 acres of southern Santa Clara County. The HCP has been approved by the local partners and has been in effect since October 14, 2013.

The project site is located in Santa Clara Valley HCP Area 4: Urban Development equal to or greater than 2 acres covered. Greystone Park is located in the Golf course/Urban Park Land Cover Zone, while the ACDS campus is in the Urban – Suburban land cover zone. Urban-Suburban land is comprised of areas where native vegetation has been cleared for residential, commercial, industrial, transportation, or recreational structures, and is defined as one or more structures per 2.5 acres. Vegetation found in the Urban-Suburban land cover type is usually in the form of landscaped residences, planted street trees, and parklands.

The portables would be relocated to a portion of the site that is in Fee Zone B (Agricultural and Valley Floor Lands) while the remainder of the ACDS campus is within the Urban Area land cover (no fee zone). The site is not located within a Burrowing Owl fee zone. The site is not located in wetland or serpentine fee zones. The project site is not located within any plant or wildlife survey area. The project site is not within Category 1 Stream buffers and setbacks, Valley Oak and Blue Oak Woodlands, or Urban Reserve System Interface zones.

Envision San José 2040 General Plan Policies

The following policies from the 2040 General Plan apply to the project:

- MS-21.4 Encourage the maintenance of mature trees, especially natives, on public and private property as an integral part of the community forest. Prior to allowing the removal of any mature tree, pursue all reasonable measures to preserve it.
- MS-21.5 As part of the development review process, preserve protected trees (as
 defined by the Municipal Code), and other significant trees. Avoid any adverse effect on
 the health and longevity of protected or other significant trees through appropriate
 design measures and construction practices. Special priority should be given to the
 preservation of native oaks and native sycamores. When tree preservation is not
 feasible, include appropriate tree replacement, both in number and spread of canopy.
- MS-21.6 As a condition of new development, require the planting and maintenance of both street trees and trees on private property to achieve a level of tree coverage in compliance with and that implements City laws, policies or guidelines.
- ER-5.1 Avoid implementing activities that result in the loss of active native birds' nests, including both direct loss and indirect loss through abandonment, of native birds.
 Avoidance of activities that could result in impacts to nests during the breeding season or maintenance of buffers between such activities and active nests would avoid such impacts.
- ER-5.2 Require that development projects incorporate measures to avoid impacts to nesting migratory birds.

Findings

- a) through d). No Impact. The site is an existing developed school campus within a residential neighborhood and does not contain sensitive biological resources such as sensitive habitat or wetlands.
- e) through f). Less than Significant Impact. Standard conditions for all projects are in place to protect nesting birds if tree removal occurs on site (see Project Description). Any tree removal would need to be performed in accordance with the City's tree ordinance. The project site includes areas in the Santa Clara Valley HCP designated as Urban-Suburban and Golf Course/Urban Park. The implementation of the full Master Plan is expected to disturb more than 2 acres. The project site is not within a mapped HCP Wildlife Survey or Plant Survey Area.

Compliance with the HCP through the Standard Project Conditions listed below (and in Project Description) would reduce potential impacts to less than significant:

Standard Project Conditions:

Nesting Bird Surveys. To avoid impacts to nesting birds and violation of state and federal laws pertaining to birds, all construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (generally prior to February 1 or after August 31). If construction and construction noise occurs within the avian nesting season (from February 1 to August 31 or according to local requirements), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot buffer (passerines), 500-foot buffer (small raptors, such as accipiters), and 1,000-foot buffer (large raptors, such as buteos) around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than five days before commencement of any site disturbance activities and equipment mobilization. The bird survey buffer radius may be modified in consultation with CDFW. If project activities are delayed by more than five days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of the surveys shall be documented. If it is determined that birds are actively nesting within the survey area, the BMP measure described in the following paragraph shall apply. Conversely, if the survey area is found to be absent of nesting birds, the BMP described in the following paragraph shall not be required.

If pre-construction nesting bird surveys result in the location of active nests, no site disturbance or mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), shall take place within 250 feet of non-raptor nests, 500-feet of small raptor nests, and 1,000 feet of large raptor nests, or as determined by a qualified biologist in consultation with CDFW, until the chicks have fledged. Monitoring shall be required to ensure compliance with the MBTA and relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented.

HCP Conditions. The project is subject to applicable HCP conditions and fees prior to issuance of any grading permit. The project applicant shall submit a Santa Clara Valley Habitat Plan Coverage Screening Form to the Supervising Environmental Planner of the Department of Planning, Building, and Code Enforcement for review and will complete subsequent forms, reports, and or studies as needed.

4.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				
c) Disturb any human remains, including those interred outside of dedicated cemeteries?				

Environmental Setting

The project site is a developed parcel of land in the southern extent of the City of San José. The majority of the buildings currently standing on the site were constructed between 1965 and 1968, along with the surrounding Almaden Valley neighborhood, at the height of urban development and sprawl (San Mateo County Times 1968; Cartwright Aerial Surveys 1965; Historicaerials.com 2019). Historical research did not reveal any further information regarding the architect, associated people or events, or other information on the history of the site.

Background research included examining historic maps and aerial photos of the project vicinity and surroundings, as well as archived newspaper reports and assessor parcel records, from the following resources: San José Public Library Digital Collections, History San José Online Catalog, Calisphere, University of California Santa Barbara Library Frame Finder, Newspapers.com, Historicaerials.com, and USGS Topographic Map Collection (TopoView). A California Historical Resources Information System (CHRIS) search was conducted through the Northwest Information Center (NWIC) on June 3, 2019, and a Sacred Lands File (SLF) search was completed on May 16, 2019 by the Native American Heritage Commission (NAHC).

- a) Less than Significant Impact. The CHRIS search revealed the site contains no listed historical resources. The school buildings are over 50 years old and therefore qualify based on age to be considered for inclusion for the California Register of Historic Resources (CRHR). However, they do not appear to meet the criteria required for inclusion. There is no evidence to suggest that the buildings are associated with events that have made a significant impact on California history (Criterion 1) or are associated with people important to California history (Criterion 2). Examination of the buildings show a utilitarian construction with no design elements that are distinctive characteristics of type, period, or method of construction, and there is no evidence that the buildings were designed or constructed by a master craftsman (Criterion 3). Criterion 4 is reserved for archaeological sites and does not apply. As demonstrated, the buildings do not qualify for the CRHR or the local registry and are, therefore, not a historic resource per CEQA.
- b) and c) Less than Significant Impact. The CHRIS search showed no previously known archaeological resources within the project boundary and the site has a moderate archaeological sensitivity for cultural resources in previously undisturbed areas. However, three archaeological resource locations were shown within the 0.25-mile study area surrounding the site, but not in the immediate project site vicinity. Various cultural resources have historically

been found in the Alamitos Creek area. The SLF search was returned with negative results for the project area.

Native American burials and other resources in the Bay Area are often found near streams or water sources. Examination of historic maps shows that a now defunct watercourse, feeding into Alamitos Creek, once ran across the project site (shown clearly on the Los Gatos 1940 USGS map). Previous development in the project vicinity south of the creek has not discovered archaeological resources and the portion of the campus that would be redeveloped as part of the Master Plan implementation is already largely disturbed and developed with existing pavement, walkways, and or buildings. As such, the likelihood that buried cultural resources exist in the areas to be developed as part of the Master Plan is considered low to moderate. Therefore, there is the possibility that as yet undiscovered Native American resources – including burials – may exist in undisturbed native soils. In order to safeguard unknown, buried, cultural resources, the following Standard Project Conditions are included as part of the project.

Standard Project Conditions:

If prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped, the Director of Planning, Building and Code Enforcement (PBCE) or the Director's designee and the City's Historic Preservation Officer shall be notified, and a qualified archaeologist shall examine the find. The archaeologist shall 1) evaluate the find(s) to determine if they meet the definition of a historical or archaeological resource; and (2) make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits. Recommendations could include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery shall be submitted to Director of PBCE or the Director's designee and the City's Historic Preservation Officer and the Northwest Information Center (if applicable). Project personnel shall not collect or move any cultural materials.

If any human remains are found during any field investigations, grading, or other construction activities, all provisions of California Health and Safety Code Sections 7054 and 7050.5 and Public Resources Code Sections 5097.9 through 5097.99, as amended per Assembly Bill 2641, shall be followed. If human remains are discovered during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The project applicant shall immediately notify the Director of Planning, Building and Code Enforcement (PBCE) or the Director's designee and the qualified archaeologist, who shall then notify the Santa Clara County Coroner. The Coroner will make a determination as to whether the remains are Native American. If the remains are believed to be Native American, the Coroner will contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then designate a Most Likely Descendant (MLD). The MLD will inspect the remains and make a recommendation on the treatment of the remains and associated artifacts. If one of the following conditions occurs, the landowner or his authorized representative shall work with the Coroner to reinter the Native American human remains and associated grave goods with appropriate dignity in a location not subject to further subsurface disturbance:

- The NAHC is unable to identify a MLD or the MLD failed to make a recommendation within 48 hours after being given access to the site.
- The MLD identified fails to make a recommendation; or
- The landowner or his authorized representative rejects the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner.

4.6 ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				\boxtimes

Findings

a) and b), No Impact. The project would replace existing buildings on campus with new buildings. The new buildings would be designed according to current building code standards. New buildings are subject to DSA review and approval. No net increase in overall student capacity is anticipated, therefore overall energy use and consumption is not expected to be wasteful or inefficient.

4.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Note: Refer to Division of Mines and Geology Special Publication 42.				
ii) Strong seismic ground shaking?			\boxtimes	
iii) Seismic-related ground failure, including liquefaction?				
iv) 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 onor off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			\boxtimes	
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 waste water disposal systems where sewers are not available for the disposal of waste water?				
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				

A Geotechnical Investigation and Geologic Hazards Evaluation for the project site was performed by Cornerstone Earth Group (July 2018). Each phase of the Master Plan would adhere to recommendations of a site/phase specific Geotechnical Investigation. New construction would adhere to current California building code standards at the time the buildings are designed and would be subject to review and approval by the California Division of the State Architect (DSA).

The project site is flat and largely developed with an existing private school campus and facilities. The Geotechnical Report states that Quaternary age alluvial deposits are prevalent in the area surrounding the site and that the site is underlain by Holocene alluvial fan deposits. There is a narrow band of northwesterly trending fill traveling in a line through the center of campus which apparently represents an infilled channel of a former creek channel. The

Geotechnical Report indicates Quaternary age alluvial deposits typically consist of 52% lean clay, 34% silt, and 14% other constituents. Ground water was encountered in test borings 11 to 121/2 feet below existing grades.

Findings

- a) through d) Less than Significant Impact. The nearest active fault is the Shannon fault approximately ½ mile away. The project site is not located in an Alquist Priolo Earthquake fault zone (Cornerstone 2018b). The site is within a State-designated liquefaction hazard zone and analyses performed by Cornerstone indicates post-liquefaction ground settlement ranging up to about ½ inch and differential settlement is on the order of 1/3-inch (Cornerstone 2018b). Ground rupture and lateral spreading potentials at the site are determined to be low (Cornerstone 2018b). Unsaturated soils could experience 1/3-inch total settlement following an earthquake (Cornerstone 2018b). Landsliding does not pose a threat to the site and planned school development (Cornerstone 2018b). Due to the large distance to San Francisco Bay, potential inundation due to tsunami or seiche is considered low (Cornerstone 2018b). As stated above, each phase of the Master Plan would adhere to the recommendations of a site- specific Geotechnical Investigation and new construction would be subject to review and approval by the California DSA. Therefore, potential impacts are considered less than significant.
- **e) No Impact.** The proposed project is served by existing sanitary sewer infrastructure and does not involve the use of septic tanks.
- **f) No Impact.** The project site is an existing private school campus in an urbanized area of San Jose. No known unique paleontological resource or geologic features exist on site.

4.8 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b) Conflict with an applicable, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

Findings

- a) Less than Significant Impact. The project is the implementation of a master plan that would guide the replacement of existing school buildings on campus with new buildings, over the course of the next approximately 15 years. The new buildings would be designed according to current building code standards, including Part 11 of the California Building Code (Green Building Standards). New buildings are subject to California DSA review and approval. No net increase in overall student capacity is proposed, therefore overall energy use and consumption and GHG emissions due to operational traffic is not expected to increase significantly over current operations. As noted above, the project is below the screening criteria for construction related emissions.
- b) No Impact. The proposed project would replace old school structures with new school buildings and modify the site's existing parking and driveway access and allow the continued operation of the site with school uses. The City previously had an adopted GHG Reduction Strategy that was approved by the City Council in November 2011 in conjunction with the Envision San José 2040 General Plan. Although this GHG Reduction Strategy is no longer valid, it represents the most recent plan the City has adopted solely for purposes of reducing GHG emissions, and a comparison is drawn between it and the project for good measure. In order to conform to the GHG Reduction Strategy, projects must be consistent with the Land Use/Transportation Diagram and incorporate features into the project that meet the mandatory measures of the strategy. Consistency with the mandatory measures are as follows:
 - The project is consistent with the land use/transportation diagram.
 - The project would be designed consistent with the current California Building Code standards, including California Green Building standards (CalGreen) in effect at the time the buildings are proposed. All master plan phases shall be designed according to San José Green Building Ordinance standards.
 - The project shall be designed to be consistent with pedestrian and bicycle site design requirements of the Public/Quasi Public zoning.
 - The two closest bus stops are located on Almaden Expressway approximately 1,000 feet southwest of the project site near the intersection with Trinidad Drive.
 - Several buildings on site are over 50 years old and therefore qualify for review as
 historical resources under CEQA. However, as stated above in Cultural Resources, the
 buildings do not meet the criteria required for inclusion in the CRHR and are, therefore,
 not a historic resource per CEQA.

- The project does not involve the development of an energy intensive use.
- The school currently implements strategies to reduce trips to the site in order to lessen
 impacts on the surrounding community. The operation of the school would continue to
 implement these trip reduction strategies and allow for more parking on site and more
 efficient and safer student pick up and drop off locations.

4.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 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?				
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				

Findings

a) through c), Less than Significant Impact. The proposed project consists of replacement and construction of existing buildings on an existing school campus and does not involve the use, transport, or disposal of significant amounts of hazardous materials or waste or create a significant hazard to the public through accident conditions or emit hazardous emissions within one-quarter mile of a school (also refer to Air Quality section).

Project construction would involve the use of toxic and hazardous substances in the form of vehicle fuels and fluids, paints, solvents, and other typical construction materials. The use, storage, and application of any toxic or hazardous substances would be regulated by federal, state, and local regulations.

A Phase I Environmental Site Assessment was prepared for the subject property by Cornerstone Earth Group on May 8, 2018. The report revealed that prior to development of the site with the Henderson Elementary School in the mid-1960, it was possibly used for hay production or cattle grazing.

The Phase I report states no hazardous material spill incidents have been reported in the site vicinity that would be likely to significantly impact the site. Lead-based paint, termite control pesticides, naturally occurring asbestos (NOA), mercury contamination, and asbestos containing building materials were identified as potential concerns at the site and the report recommended sampling for these materials prior to implementing project activities. The report also recommends following DTSC protocol for documenting the source and quality of imported fill to the site. It is standard protocol for the school to test for and remediate any asbestos containing materials, lead based paint, and asbestos containing materials prior to demolition activities. These testing requirements are presented in the Project Description as BMPs incorporated into the project.

- d) Less than Significant Impact. The project site is not listed on any list compiled pursuant to Section 65962.5 of the Government Code, otherwise known as the Cortese List. The Cortese list is actually comprised of several lists compiled by different agencies under the California Environmental Protection Agency (CalEPA) including Department of Toxic Substances Control (EnviroStor database and hazardous waste sites subject to corrective action list) and the State Water Quality Control Board (GeoTracker database, solid waste disposal sites list, and active CDO/CAO (cease and desist/cleanup and abatement orders). The project site is not on any of the above-mentioned lists or databases (DTSC 2019a, 2019b, 2019c, SWRCB 2019a, SWRCB 2019b, Cornerstone 2018).
- **e)** Less than Significant Impact. The project is the implementation of a master plan to improve an existing private school campus and does not involve uses or activities that would result in a safety hazard or result in excessive noise for persons working or residing in the project area. See also Noise.
- **f)** Less than Significant Impact. The project is the implementation of a master plan to renovate the facilities associated with a private school campus. The project is considered infill development on an already developed site and would not physically interfere with an adopted emergency response plan.
- g) No Impact. The project site is not located in a Very High Fire Hazard Severity Zone (CalFire 2008), however, it is located in a Wildland Urban Interface (WUI) Area. The proposed Phase I Master Plan building design includes WUI building standards and the design plans have been approved by DSA. Subsequent building plans developed for future phases of the Master Plan would also be subject to the WUI building standards and approval by DSA.

4.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater 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 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?			\boxtimes	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				\boxtimes
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

Findings

a) and c), Less than Significant Impact. The project does not substantially alter the overall drainage pattern of the site. Much of the existing developed campus is already covered in impervious surfaces. Each phase of construction would include the preparation of stormwater and erosion control plans which would be implemented during construction to ensure water quality is not impacted during or after construction. In addition, new impervious surfaces at the site would be designed with appropriately sized stormwater treatment controls to ensure new development would not adversely affect post-construction stormwater runoff water quality, quantity, or velocity.

Implementation of the Master Plan would occur in phases over the next approximately 15 years. Construction projects in California causing land disturbances that are equal to 1.0 acre or greater must comply with State requirements to control the discharge of stormwater pollutants

under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit; Water Board Order No. 2009-0009-DWQ). Prior to the start of construction/demolition, a Notice of Intent must be filed with the State Water Resources Control Board. A Storm Water Pollution Prevention Plan must be developed and maintained during the project and it must include the use of Best Management Practices (BMPs) to protect water quality until the site is stabilized. These requirements are mandatory and included as part of the project (see Section 3.10).

- **b) and e), No Impact.** Impervious calculations for existing and proposed full build-out of the Master Plan show that the implementation of the Master Plan would not increase the amount of impervious surface at the site.
- d) Less than Significant Impact. Cornerstone (2018b) found that a portion of the Multi-purpose building site within Zone X, defined as "areas of 0.2% annual chance of flood; areas of 1% annual chance flood with average depths of less than one foot or with drainage areas less than one square mile; and areas protected by levees from 1% annual chance flood." The southern half to two-thirds of the multi-purpose building is located in Zone D, defined as "Areas in which flood hazards are undetermined but possible" and recommends a civil engineer be retained to confirm this information. All report recommendations shall be incorporated into project designs and plans.

4.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				\boxtimes
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?				

Findings

- **a) No Impact**. The site has been used as a school since the 1960's, therefore, implementation of the Master Plan would not physically divide an established community.
- **b)** Less than Significant Impact. The project site is currently within the Public/Quasi-Public (PQP) land use designation and zoned R-1-5. The R-1 zoning is a single-family residence district for the location of single-family home subdivisions. Private schools are conditionally permitted in the R-1 zoning district. In order to conform to the General Plan designation, the project includes a conventional rezoning the property from R-1-5 to Public/Quasi-Public (PQP) and the issuance of a Special Use Permit for the private school use.

Development standards for the PQP zoning are specified in Part 3 of Chapter 20.40 of the Municipal Code. The zoning provides for 10-foot side and front yard setbacks, as well as a 65-foot height maximum. Phase I of the Master Plan currently conforms to the setback requirements and future phases would also be required to conform or allowed an exception through an approved development permit.

The Municipal Code (Section 20.40.500.B) requires that no outdoor activities such as loading, sweeping, landscaping or maintenance shall occur within 150 feet of a residentially zoned property between the hours of 12:00 midnight to 6:00 a.m. The ACDS Operations Plan indicates maintenance occurs between the hours of 7:00 a.m. and 12:00 midnight, and is therefore consistent with this requirement

Revised master plan and Phase 1 plans show the project is consistent with the City's Vehicle Parking Requirements (Section 20.90.060, Table 20-190), Bicycle Parking Requirements (Section 20.90.060), Clean Air Vehicles (Section 20.90.060, Table 20-215), Driveways (Section 20.90.130), and Signage (Section 23.04.330).

Consistency with the City's noise performance standards are addressed in the noise section.

4.12 MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				\boxtimes
b) Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local -general plan, specific plan or other land use plan?				\boxtimes

Findings

a) and b), No Impact. The project site is located in a developed area and surrounded by residential and public park uses. The State Mining and Geology Board under the Surface Mining and Reclamation Act of 1975 (SMARA) has designated an area of Communications Hill in Central San José, bounded by the Union Pacific Railroad, Curtner Avenue, State Route 87, and Hillsdale Avenue, as a regional source of construction aggregate materials. Other than the Communications Hills area, San José does not have mineral deposits subject to SMARA. The project site is not located in the Communications Hill area.

4.13 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable standards of other agencies?				
b) Generation of excessive groundborne vibration or groundborne noise levels?				
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, would the project expose people residing or working in the project area to excessive noise levels?				\boxtimes

A Noise Impact Assessment Report was prepared by MIG, Inc., in January 2020 (see Appendix A). The noise report analyzed the existing noise environment and evaluated the proposed Master Plan improvements against City of San José standards. This IS incorporates by reference the Noise Impact Assessment Report which includes relevant Environmental and Regulatory setting information including a discussion of the noise fundamentals defining noise, vibration and groundborne noise, environmental setting with project location and site description, existing noise, and vibration environment and existing ambient noise levels, noise sensitive receptors, federal, state and local noise regulations in the.

For the purposes of this Report:

- A substantial temporary noise level increase would occur if the project involves substantial construction noise generating activities for a period of 12 months or more within 500 feet of residential uses and does not prepare a Construction Noise Logistics Plan (General Plan Policy EC-1.7).
- A substantial permanent noise level increase would occur if project-generated noise would result in: 1) an increase of 5 dBA DNL or more where the noise levels would remain within the "Normally Acceptable" level; or 2) an increase of 3 dBA DNL or more where the noise levels would equal or exceed the "Normally Acceptable" level (General Plan Policy EC-1.2).

In addition to the CEQA thresholds of significance, the Noise Report evaluates the proposed Project's consistency with the 55 dBA noise limit established by Section 20.40.6500 of the City's Municipal Code.¹

¹ This approach follows guidance provided by San Jose City staff regarding the City's municipal code standard.

Findings

a) Less than Significant Impact.

Land Use Compatibility

The proposed project consists of modernizing an existing school with new facilities. The City's General Plan indicates 55 DNL is the normally acceptable exterior noise exposure level for public and quasi-public land uses (e.g., schools). The results of the ambient noise monitoring show existing noise levels at the ACDS Campus are approximately 55 dBA DNL; however, these noise levels capture existing noise generated with typical school activities. Absent typical school noise levels captured by the noise monitoring effort; the 24-hour measurement would have been lower than 55 dBA DNL.

The ACDS Campus Master Plan does not propose any activities that would substantially affect the ambient noise environment (e.g., the school does not propose to increase enrollment, a bell system or amplified public address system, etc.). Estimates of the proposed project's operational noise levels indicate the Project would not generate noise levels that would increase the ambient noise environment by more than 3.0 DNL at any nearby sensitive receptor location with an existing ambient noise level of "Normally Acceptable," as defined in the City's General Plan.² In addition, the proposed project would be located in an ambient noise environment that is consistent with the City's land use compatibility guidelines for public and quasi-public land uses (e.g., schools). The proposed project, therefore, is considered compatible with the existing and projected ambient noise level at the project site.

Construction Noise

The proposed project would be constructed over the next approximately 15 years in four different phases, each lasting approximately 12 to 15 months each. Construction activities associated with Master Plan implementation would generally include demolition, site preparation, grading, construction, paving, and architectural coating work.

Project construction would require the use of heavy-duty construction equipment that could temporarily increase noise levels at adjacent property lines near work areas. The type of equipment used could include bulldozers, backhoes, a grader, compactors/rollers, small cranes, and material handlers, lifts, and trucks. Since project-specific construction equipment information is not available at this time, potential construction-related noise impacts can only be evaluated based on the typical construction activities associated with a commercial development. Table 4-2 presents the estimated, worst-case noise levels that could occur from operation of typical construction equipment.

² The proposed project would result in noise levels would equal or exceed the "Normally Acceptable" standard for nearby residential land uses (i.e., 55 dBA DNL). Consistent with General Plan Policy EC-1.2, the incremental increase would be potentially significant if the project results in an increase of 3.0 dBA DNL or more under these conditions. Accordingly, this analysis utilizes a 3.0 dBA DNL increase as the CEQA threshold of significance, since the ambient noise levels at nearby sensitive residential receptor property lines would be in excess of 55 dBA DNL.

Table 4-2: Typical Construction Equipment Noise Levels (dBA)						
	Reference Noise	Percent	Predicted Noise Levels (Leq) at Distance ^(C)			
Equipment	Level at 50 Feet (Lmax) ^(A)	Usage Factor ^(B)	50 Feet	75 feet	100 feet	
Backhoe	80	40	76	72	70	
Bulldozer	85	40	81	77	75	
Compact Roller	80	20	73	69	67	
Crane	85	16	77	74	71	
Delivery Truck	85	40	81	77	75	
Excavator	85	40	81	77	75	
Generator	82	50	79	75	73	
Pneumatic tools	85	50	82	78	76	
Scraper	85	40	82	77	75	

Sources: Caltrans, 2013b and FHWA, 2010.

As shown in Table 4-2, the worst-case Leq and Lmax noise levels associated with the operation of a dozer, excavator, scraper, etc. are predicted to be approximately 82 and 85 dBA, respectively, at a distance of 50 feet from the equipment operating area. The concurrent operation of two or more pieces of construction equipment would result in noise levels of approximately 86 dBA Leq and 90 dBA Lmax at a distance of 50 feet from equipment operating areas³.

During demolition, site preparation, grading, and paving activities construction equipment would operate throughout the site, moving closer to one property line and farther away from another; building construction and architectural coating activities would be concentrated at building pad locations. For these reasons, potential construction noise levels are estimated for worst-case equipment operations for each phase of Master Plan implementation, as described below.

 Phase 1: Construction activities associated with development of the multipurpose facility are evaluated at a distance of 100 feet, which is the approximate distance between the proposed building and residences across the street on Akio Way

Almaden Country Day School Project

⁽A) L_{max} noise levels based on manufacturer's specifications.

⁽B) Usage factor refers to the amount of time the equipment produces noise over the time period.

⁽C) Estimate does not account for any atmospheric or ground attenuation factors. Calculated noise levels based on Caltrans, 2009: L_{eq} (hourly) = L_{max} at 50 feet – 20log (D/50) + 10log (UF), where: L_{max} = reference L_{max} from manufacturer or other source; D = distance of interest; UF = usage fraction or fraction of time period of interest equipment is in use.

³ As shown in Table 4-2 a single bulldozer provides a sound level of 81 dBA Leq at a distance of 50 feet; when two identical sound levels are combined, the noise level increases to 84 dBA Leq and when three identical sound levels are combined, the noise level increases to 86 dBA Leq. These estimates assume no shielding or other noise control measures are in place at or near the work areas.

- Phase 2: Construction activities associated with Phase 2 are evaluated at three different locations:
 - Noise levels associated with the deployment of the middle school and administration building is evaluated at a distance of 100 feet, which is the approximate distance between the proposed building and residences across the street on Akio Way.
 - Noise levels associated with the development of the eastern parking lot are evaluated at a distance of 50 feet, which is the approximate distance between the center of the eastern parking lot, and the property line with residences along Winterset Way.
 - Noise levels associated with the development of the western parking lot are evaluated at a distance of 75 feet, which is the approximate distance between the center of the western parking lot and the residences along Trinidad Drive.
- Phase 3: Construction activities associated with development of the elementary school building are evaluated at a distance of 100 feet, which is the approximate distance between the proposed building and residences on Trinidad Drive.
- Phase 4: Construction activities associated with the enrichment building and auditorium are evaluated at a distance of 100 feet, which is the approximate distance between the auditorium and the property line with residences along Akio Way.

Table 4-3, summarizes potential, worst-case equipment noise levels at sensitive receptor locations by phase.

Table 4-3: Worst-Cast Noise Levels at Residential Receptor Locations by Phase					
		Predicted Noi	Predicted Noise Level (Leq)		
Phase / Activity	Distance (feet)	Single Piece of Equipment	Multiple Pieces of Equipment ^(A)		
Phase 1: Multipurpose Facility	100	75	79		
Phase 2: Middle School / Administration Building	100	75	79		
Phase 2: Eastern Parking Lot	50	81	85		
Phase 2: Western Parking Lot	75	77	81		
Phase 3: Elementary School Building	100	75	79		
Phase 4: Enrichment Building / Auditorium	100	75	79		
(A) Predicted worst-case noise levels are based or	the concurrent	operation of a bulldo	zer, delivery truck,		

⁽A) Predicted worst-case noise levels are based on the concurrent operation of a bulldozer, delivery truck, and backhoe.

As shown in Table 4-3, worst-case noise levels could range from approximately 75 dBA to 85 dBA at nearby sensitive receptor locations depending on the phase and activity being undertaken. In actuality, construction noise levels would likely be lower, since these estimated noise levels evaluate the concurrent operation of equipment at the same distance from the receptor location. In addition, the site is already developed and level, so extensive site-preparation is not anticipated. Furthermore, heavy-duty construction equipment cycles between

higher and lower loads, adding variability to the noise generated by the equipment in any given minute. Finally, the above estimates do not consider any potential shielding that would be provided by other buildings on campus (e.g., the middle school / administration building would provide shielding for residences along Trinidad Drive and Akio Way during development of the enrichment building and auditorium).

The City of San José does not have established maximum construction noise level limitations; however, General Plan Policy EC-1.7 requires construction projects within 500 feet of residential land uses to prepare a Construction Noise Logistics Plan if the project would involve substantial noise generating activities for 12 or more months.

City Municipal Code Section 20.100.450 limits construction activities occurring within 500 feet of residence to the hours of 7 AM to 7 PM, Monday through Friday, unless alternative hours are expressly allowed in a development permit or other planning approval. All phases of project construction would occur consistent with the requirements of the Municipal Code.

As stated previously, each phase of Campus Master Plan construction is anticipated to last approximately 12 to 15 months. As indicated in the project description, ACDS will prepare a Construction Noise Logistics Plan prior to beginning construction activity for any Campus Master Plan phase, consistent with the requirements of General Plan Policy EC-1.7. At a minimum, the Construction Noise Logistics Plan should specify the hours of construction, noise and vibration minimization measures, posting or notification of construction schedule, and the designation of a noise disturbance coordinator who would respond to neighborhood complaints.

As further explained in the Project Description, the Construction Noise Logistics Plan shall:

- Designate an ACDS employee and/or contractor's representative to serve as a noise disturbance coordinator responsible for receiving noise complaints and resolving construction-noise related issues.
- Include procedures describing how the noise disturbance coordinator will receive, respond to, and resolve construction noise complaints. At a minimum, upon receipt of a noise complaint, the Contractor and/or ACDS representative described in the first sub-bullet above shall identify the noise source generating the complaint, determine the cause of the complaint, and take steps to resolve the complaint.
- Restrict construction work hours to the hours specified in City of San José Municipal Code Section 20.11.450 (7:00 AM to 7:00 PM, Monday through Friday)
- Require construction staging areas to be established in locations that create the
 greatest distance between the construction-related noise sources and noisesensitive receptors nearest the project sure during all project construction
- Provide notice (at least 10 days prior to the start of construction activities) to all
 adjacent residences that describes the approximate start date and schedule for the
 construction activities and a contact name and phone number for the construction
 contractor and/or ACDS staff person responsible for handling construction-related
 noise complaints. The notice shall also identify periods of peak construction activities
 and noise levels (e.g., grading activities, foundation work, etc.).
- Specify the noise and vibration minimization measures that will be undertaken during the construction phase to reduce construction-related noise levels. Such measures may include, but are not limited to:

- Equipping all internal combustion engine-drive equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment being controlled.
- o Prohibiting unnecessary idling of internal combustion engines (i.e., idling should generally be limited to no more than five minutes).
- Using hydraulically or electrically powered impact tools (e.g., jack hammer) to avoid noise associated with compressed air exhaust from pneumatically powered tools, if feasible.
- Reducing noise from pneumatic tools through the use of a noise suppression device on the compressed air exhaust.
- Connecting to existing electrical service at the site to avoid the use of stationary, diesel- or other alternatively-fueled power generators.
- Locating stationary noise-generating equipment such as pumps, compressors, and welding machines as far from sensitive receptor locations as practical. If such equipment must be located near receptors, provide shielding in the form of a three-sided sound enclosure (with a full or partial roof) that provides for proper ventilation, equipment operation, and effective noise control.
- Phasing demolition and construction activities to take advantage of noise shielding provided by existing structures (i.e., start from the side of the building the farthest away from nearby sensitive receptors).
- Prohibiting noise from radios or other amplified sound devices to be audible beyond the property line of the construction site.

The Noise report noted the potential for the project to exceed the City's 55 dBA Lmax noise limitation at a receptor property line for operational impacts (see below). This is not a threshold of significance used by the City in the CEQA analysis, however, in response to the report's findings, ACDS has included a permanent barrier along the entire portion of the proposed project's southeastern parking lot in Phase 2 of the implementation of the master plan as a project design feature, which would be incorporated into the project as a condition of approval. The barrier will be constructed free of openings or gaps and have a minimum rated transmission loss value of 25 dBA (or higher). The design of this barrier would reduce noise levels between the southeastern parking lot and the residential property line by 15 dBA (or more). With the inclusion of the recommended barrier, the project would not exceed the City's 55 dBA Lmax noise limitation at a receptor property line.

Operational Impacts

The ACDS is an existing school that generates noise levels from typical school activities, including vehicle trips, operation of HVAC units, landscaping and maintenance activities, waste-disposal truck traffic, etc. Implementation of the proposed project would not change the types of noise generated at the project site but could change the locations where these noise sources occur. Under implementation of the proposed project, the existing ambient noise environment could change as a result of:

 Existing portable classrooms being removed, as well as their HVAC units, and new HVAC equipment being installed top of the new buildings proposed in the Campus Master Plan:

- On-site traffic being shifted to two driveways: one along Trinidad Drive, and one along Akio Way; and
- Primary on-site parking being shifted to the southeastern parking lot under the implementation of Phase 2. Potential noise levels associated with the use of this parking lot could be more prominent during after hour / weekend use of the multipurpose building.

HVAC Equipment Operation

Although not depicted on all buildings shown the ACDS Campus Master Plan site plan, it is anticipated each one of the buildings proposed under the Master Plan would feature HVAC unit(s) on top of the rooves. The specific locations of HVAC units and parapet walls for each project phase are contingent on final building design. For example, the multipurpose facility, which is the only building for which detailed drawings are available at this point, would feature parapet walls that shield the multipurpose HVAC units from residential receptors. Roof-top mounted HVAC units are presumed to be a Carrier Model 48HC or equivalent rated at 3 tons and capable of producing a noise level of approximately 76 dBA at a distance of 3 feet. Rooftop HVAC units would generally be located in the center of the proposed buildings.

HVAC equipment was presumed to operate for 15 minutes every hour of the day to account for refrigeration and building heating and cooling needs. This assumption is considered conservative (likely to overestimate noise) since this level of operation would likely not occur during the nighttime (i.e., maximum use involves afternoon cooling operations in the summer, and morning and early-afternoon heating operations during the winter). The unit was assumed to be at least partially concealed behind a parapet wall that would shield the HVAC unit from the street and serve to reduce potential HVAC unit noise levels at adjacent property lines. The level of attenuation provided by this partial shielding was assumed to be 5 dBA.⁴

Noise levels associated with operation of two HVAC units were assessed at a distance of 165 feet. This is the approximate distance between the center of the auditorium and multipurpose building, and the residential property line along the project site's eastern boundary. At this distance, the two HVAC units would produce an hourly noise level of approximately 49.2 dBA Leq, which is lower than the existing, hourly ambient noise level monitored along the project site's southeastern boundary. For example, during the 8:00 AM hour on December 10, 2019, it was observed the hourly average noise level was approximately 55.1 dBA Leq, and a primary noise source at this location was from middle school portable classroom HVAC operation. Under implementation of the Campus Master Plan these existing, middle school classrooms would be removed, and HVAC units would generally be located further away from residential receptors.

Vehicular Operation on Trinidad Drive and Akio Way Driveway

Under buildout of the Campus Master Plan, two, new driveways would be constructed along the campus' western and southern borders. The Trinidad Drive drop-off area would be designated for kindergarten and elementary grades, while the Akio Way drop-off area would be designated for the middle school grades. Based on existing, inbound and outbound trips to the ACDS

⁴ Common building materials such as wood framing materials, plywood, and light concrete/stucco all have transmission loss rating greater than 20 dBA to 25 dBA and are capable of reducing transmitted sound levels by 10 to 15 dBA at minimum (Caltrans, 2013a). This analysis assumes a 5-dBA reduction in HVAC unit noise levels associated with parapet walls. This is considered a conservative assumption (i.e., likely to underestimate shielding and noise attenuation).

Campus in the morning in afternoon, it is estimated approximately 151 and 70 vehicles would access the Trinidad Drive drop-off area during the AM and after school peak hours, respectively, and 74 and 35 vehicles could access the Akio Way drop-off area during the AM and after school peak hours, respectively (Hexagon 2019). This is in contrast to existing conditions on Trinidad Drive where there are approximately 171 and 91 inbound and outbound trips during the during the AM and after school peak hours, respectively. Similarly, for existing inbound and outbound trips on Akio Way, there were approximately 91 and 29 trips occurring during the AM and after school peak hours, respectively.

The proposed driveway reconfiguration would not result in a substantial noise level increase at nearby residential receptors. The ambient noise environment at and near the ACDS Campus during the morning and afternoon is predominantly influenced by traffic on Trinidad Drive and Akio Way. Although some of this traffic is attributable to students, parents, and staff at ACDS, the majority of it is attributable to other traffic, such as that from other schools in the area (e.g., Bret Harte Middle School, Leland High School, etc.) and adults traveling to work. Based on the traffic analysis, it is estimated the proposed reconfiguration would reduce morning, driveway trips along Trinidad by 20, and increase driveway trips along Akio by approximately 17. It would take a doubling of energy (or associated activity) to increase noise levels by 3 dBA. The Project does not propose such a change in drop-off or pick-up distribution and any, slight change to the noise environment would likely be imperceptible to the human ear given the other sources of noise in the area. Furthermore, a short-term measurement taken approximately 20 feet north of existing drop-off activities showed typical AM peak hour noise levels were approximately 56.0 to 57.4 dBA (see Table 3-1 of the Noise Report). The proposed reconfiguration would move pickup and drop-off activities further into the campus. At a distance of approximately 80 feet (the distance from the drop-off lane on Trinidad Drive to the nearest residential property line), these noise level would be reduced to approximately 50.0 to 51.4 dBA.

Although this assessment is based on the anticipated ingress and egress associated with existing (i.e., 362 students) pick-up and drop-off activities, these findings would still hold true if this school were operating under historical enrollment (i.e., 425 students). Even if the school were to have an additional 63 students to be aligned with historic maximum, this level of additional vehicular operation would not be double what it currently is. Furthermore, the ACDS actively promotes carpooling which would likely reduce the number of vehicle trips associated with potential, additional enrollment, not to exceed historic maximum levels.

Vehicular Operation in the Southeastern Parking Lot and Activities at the Multipurpose Building

Buildout of the proposed Campus Master Plan would result in the development of a new multipurpose building, approximately 78 space parking lot in the southeastern portion of the campus. Although the multipurpose building is intended to be used primarily for school-related functions, there is the potential for it to be used for other community events during the weekday afternoons and evenings, and during the weekends. Since ACDS is not proposing or seeking loud noise generating events, such as parties, concerts, or other similar events, it is anticipated the primary source of noise occurring from its operation would be from vehicular operation in the parking lot.

Potential noise levels resulting from vehicular operation in the parking lot (e.g., doors shutting, vehicle engines starting up, etc.) were assessed using the guidance and recommendations contained in the Federal Transit Administration's *Transit Noise and Vibration Impact Assessment Handbook* (FTA, 2006). According to this handbook, parking lots with a peak hourly activity of 256 vehicles, more than triple the capacity of the proposed parking lot (i.e., average turn over time would be less than 20 minutes), can produce a noise level of 50.5 dBA Leg at a

distance of 50 feet. The center of the proposed parking lot is approximately 50 feet from the residential property line with the single-family homes on Winterset Way.

Although under this hypothetical scenario the average, hourly noise level could be 50.5 dBA Leq, instantaneous noise levels could be higher. During the monitoring at location ST-1, car doors slamming was observed to create short-term (e.g., one second) noise level increases of up to 63 dBA Lmax at a distance of 20 feet. At a distance of approximately 5 feet (i.e., the approximate distance a car door would be from the residential property line) this noise level would be closer to 69 dBA Lmax. Since the proposed parking lot would be adjacent to a residential property line, and instantaneous noise levels could be as high as 69 dBA Lmax, noise levels resulting from vehicular activity would have the potential to exceed the project-specific goal of not having exceeding 55 dBA Lmax nearby residential property lines, consistent with Section 20.40.6500 of the City's Municipal Code. The 55 dBA Lmax standard is not a CEQA threshold, but is evaluated herein this IS/MND for project consistency with all City standards.

CEQA Conclusion

The proposed project would not increase the ambient noise level as adjacent sensitive receptor locations by 3.0 dBA DNL or more for the following reasons. First, the proposed project would include deconstruction / removal of some of the existing classrooms and buildings at the project site, which could serve to reduce noise levels from HVAC operation. New facilities, such as the multipurpose building and the auditorium would be erected at locations more centrally located than existing structures. These new buildings would likely have HVAC units that generate noise that could be perceptible at nearby sensitive receptor locations; however, the noise levels would generally be lower than what they are currently and other sources of on-site noise (e.g., HVAC on middle school portables near the property boundary with single-family residences on Winterset Way) would be removed from the site. As such, the proposed Project is anticipated to reduce HVAC noise levels at nearby sensitive receptor locations.

Second, the proposed Project would involve the construction of two driveways that would change access to the ACDS Campus along Trinidad Drive and Akio Way. Although there would be changes to the ingress and egress locations and drop-off and pick-up distribution, the overall change in trips along these two streets would be nominal, and the noise likely imperceptible to the human ear given the other sources of noise in the campus' vicinity (e.g., vehicular transportation from other schools and residents in the area).

Third, even if every space in the project site's southeastern parking lot were to turn over three times in the span of an hour, the resulting hourly average noise level would be less than it is currently. In addition, this parking lot would not be used on a continuous basis throughout the day; rather, it would experience peak activity during the morning drop-off, afternoon pick-up, and during special events.

Finally, although not described in the preceding analysis, the proposed Project could serve to reduce noise levels emanating from the school site. For example, among other things, the multipurpose room is intended to be used by ACDS for P.E. and athletic purposes, meaning that some of the daytime noise levels generated by students exercising outside could be reduced by bringing them inside. For example, noise levels observed at location LT-2 on December 10th from approximately 3:30 PM to 4:45 PM showed the average 10-minute average noise level ranged from 56.1 dBA Leq to 67.6 dBA Leq, which corresponds with an ACDS basketball practice that occurs on the eastern portion of the black top. The 10-minute average noise levels generally decrease to the mid-40 dBA range after that. As such, overall perceived noise levels from the ACDS could be lower under operational activities proposed by the Master Plan, and

implementation of the Master Plan would not increase noise levels by 3 dBA DNL or more ay any nearby sensitive receptor locations. Therefore, the impact is considered less than significant.

Non-CEQA Standard

As mentioned above, although operation of the proposed project would not result in a 3 dBA DNL increase at any nearby receptor locations, activities associated with motor-vehicle operation in the campus' southeastern boundary have the potential to conflict with the 55 dBA Lmax noise level limitation established in Section 20.40.6500 of the City's Municipal Code. The construction of a permanent, 6-foot tall, concrete barrier along the campus' property line with residential land uses on Winterset Way would in included as a condition of approval for the proposed project, so the project noise levels would not exceed 55 dBA Lmax at the property line. The concrete wall would be installed at the beginning of Phase 2 to initially help shield sensitive receptor locations from construction noise, but also operational noise associated with parking lot operation.

Construction of the wall at the beginning of Phase 2 would have the added benefit of reducing construction noise levels at residential land uses along Winterset Way during construction of Phases 2 through 4. The project is designed to reduce construction and operational noise, consistent with regulatory and related City policies.

b) Less than Significant Impact. The potential for groundborne vibration is typically greatest when vibratory or large equipment such as rollers, impact drivers, or bulldozers are in operation. For the proposed project, the largest earthmoving equipment would primarily operate during demolition, site preparation, grading, and paving work across the four phases of Campus Master Plan implementation. This equipment would, at worst-case and very limited period of times, operate adjacent to the site's property lines and within approximately 25 feet of the residences immediately east of the ACDS Campus; however, most site work would occur at least 50 feet or more from project property lines. Table 4-4 lists the typical vibration levels generated by the type of heavy-duty construction equipment most likely to be used during project construction, as well as the estimated vibration levels at nearby residential receptor locations.

Table 4-4: Potential Groundborne Vibration Levels							
Equipment	Peak Particle Velocity ^(A) (Inches/Second) at Distance						
=qa.pon	25 Feet 50 Feet 100 Feet 400 Feet						
Vibratory Roller	0.21	0.085	0.035	0.006			
Large Bulldozer	0.089	0.036	0.015	0.002			
Small Bulldozer	0.03	0.012	0.005	0.001			
Loaded Truck	0.076	0.031	0.013	0.002			
Jackhammer	0.035	0.014	0.006	0.001			

Sources: Caltrans, 2013b and FTA, 2006.

As shown in Table 4-4, construction equipment vibration levels from a roller could exceed the City of San Jose's vibration detection threshold of 0.20 in/sec PPV, which is used to minimize the potential for cosmetic damage at buildings of normal conventional construction (General Plan Policy EC-2.3). This, however, is not considered to be excessive, because any vibratory roller operating near property lines would be short in duration and intermittent (lasting only a few hours or days in work areas closest to property lines) and would not be close enough to nearby structures to cause damage. In addition, none of the other pieces of heavy-duty off-road construction equipment anticipated for use (e.g., bulldozers, forklifts, etc.) would generate a vibration noise levels exceeding 0.20 in/sec PPV. Thus, short-term, intermittent construction equipment vibration levels would not be excessive. The construction impacts from groundborne vibration are considered less than significant.

Once operational, the proposed project would not result in the operation of sources that would generate substantial groundborne levels. The operational impacts from groundbourne vibration are considered less than significant.

c) No Impact. The proposed project site is located approximately 10 miles south of the San José International Airport. The proposed project is not within an airport influence area and would not expose students or staff to excessive public or private airport-related noise. Therefore, there would be no impact.

⁽A) Estimated PPV calculated as: PPV(D)=PPV(ref*(25/D^1.3 where PPV(D)= Estimated PPV at distance; PPVref= Reference PPV at 25 ft; D= Distance from equipment to receiver; and n= ground attenuation rate (1.3 for competent sands, sandy clays, silty clays, and silts).

4.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				_
a) Induce a substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				\boxtimes

Findings

a) and b), No Impact. The project is the replacement and construction of school buildings at an existing school site with no increase in student capacity. The project does not provide new housing, nor does it eliminate existing housing stock in the project area.

4.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?				\boxtimes
ii) Police protection?				\boxtimes
iii) Schools?				\boxtimes
iv) Parks?				\boxtimes
v) Other public facilities?				\boxtimes

Findings

a) i) through v), No Impact. The project is the replacement and construction of school buildings at an existing school site with no increase in student capacity above recent historical maximums. The project does not provide new housing, nor does it eliminate existing housing stock in the project area or add new students to the site. Therefore, the project would not impact public service providers.

4.16 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				\boxtimes

Findings

a) and b), No Impact. The project is the replacement and construction of school buildings at an existing school site with no increase in student capacity above recent historical maximums. The project does not provide new housing, nor does it eliminate existing housing stock in the project area or add new students to the site. Therefore, the project would not impact recreation facilities.

4.17 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?				
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3(b), which pertains to vehicle miles travelled?				
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
d) Result in inadequate emergency access?			\boxtimes	

Hexagon Transportation Consultants performed a traffic circulation review (Hexagon Transportation Consultants, April 2020, attached as Appendix B) to identify potential traffic operation issues associated with Master Plan implementation. This study was conducted for the purpose of identifying any potential traffic operations issues associated with the ACDS Master Plan, in particular issues related to the operations of the proposed new parking and drop-off areas.

Environmental Setting

Existing Transportation Network

Surrounding Roadways

Both Trinidad Drive and Akio Way are undivided two-lane residential roadways with on-street parking along both sides of the street, with the exception of the segments along the project site frontage on Akio Way (north side of the street) where parking is prohibited during the hours of 8:00 AM and 4:00 PM and along the ACDS parking lot on Trinidad Drive (east side of the street) where the curb is marked red. Both streets have posted speed limits of 25 miles per hour (mph). Although no stop signs are found at the intersections of Akio Way with Trinidad Drive and Winterset Way, both of these T-intersections operate as one-way stop-controlled intersections, with vehicles on Akio Way yielding to vehicles on Trinidad Drive and Winterset Way.

Pedestrian Facilities

Various school area signs and pavement markings are currently located along roadways providing access to ACDS. These include the following:

- High visibility crosswalks (yellow crosswalk with longitudinal lines) at the intersection of Trinidad Drive/Akio Way (north and east legs)
- Yellow crosswalks at the intersections of Trinidad Drive/Mt. Carmel Drive (south and east legs of the intersection) and Winterset Way/Akio Way (north and west legs)

- SLOW SCHOOL XING pavement markings on the approaches to the high visibility and yellow crosswalks
- California Manual on Uniform Traffic Control Devices (CA MUTCD) school zone sign assemblies S1-1 and W16-9P (school crossing ahead sign), S1-1 and S4-3P (school zone sign), and S1-1 and W16-7P (school crossing sign) along Trinidad Drive, Akio Way, Winterset Way, and Mt. Carmel Drive.

The existing school signage and pavement markings in the project area satisfy the CA MUTCD recommended signage and crosswalk/pavement markings for school zones. The locations of the existing school signs and pavement markings are shown on Figure 3 of Appendix B.

Pedestrian facilities in the vicinity of the school site include continuous sidewalks along both Trinidad Drive and Akio Way, the aforementioned marked crosswalks, and curb ramps. At the time field observations were conducted for this project (March 2019), although the surrounding intersections include curb (wheelchair) ramps, American with Disabilities Act (ADA) compatible curb ramps were observed at the intersection of Winterset Way and Akio Way only. In November 2019, ADA compatible curb ramps were being installed at the intersection of Trinidad Drive and Akio Way by the City of San Jose.

Pedestrian destinations in the vicinity of ACDS include Greystone Park, located just north of the ACDS campus, Bret Harte Middle School and Leland High School, both located east of the ACDS campus, and Los Alamitos Creek Trail, located along the north side of Camden Avenue, north of the ACDS campus (see Figure 1 in Appendix B).

Transit facilities

Nearby transit facilities include Valley Transportation Authority (VTA) bus line 83, with stops along Almaden Expressway at Trinidad Drive. Bicycle facilities include Almaden Expressway (bikes allowed), to the south of the site and Camden Avenue (bike path) with connection to the off street bike path for the Los Alamitos Creek Trail, both located to the north of the site.

Regulatory Setting

Envision San Jose 2040

Relevant General Plan policies related to transportation analysis include the following:

- Through the entitlement process for new development, projects shall be required to fund or construct needed transportation improvements for all transportation modes, giving first consideration to improvement of biking, walking and transit facilities and services that encourage reduced vehicle travel demand (TR-1.4);
- Require new development where feasible to provide on-site facilities such as bicycle storage and showers, provide connections to existing and planned facilities, dedicate land to expand existing facilities or provide new facilities such as sidewalks and/or bicycle lanes/paths, or share in the cost of improvements (TR-2.8);
- Within new development, create and maintain a pedestrian-friendly environment by connecting the internal components with safe, convenient, accessible, and pleasant pedestrian facilities and by requiring pedestrian connections between building entrances, other site features, and adjacent public streets (CD-3.3); and
- Create a pedestrian-friendly environment by connecting new residential development with safe, convenient, accessible, and pleasant pedestrian facilities. Provide such

connections between new development, its adjoining neighborhood, transit access points, schools, parks, and nearby commercial areas (LU-9.1)

City of San Jose Council Policy 5-1

The City of San Jose passed City Council Policy 5-1 on February 27, 2018. Policy 5-1 is known as the "Transportation Analysis Policy" and is the Policy for development review in the City of San Jose. This policy aligns with the City's transportation analysis with California Senate Bill 743 (SB 743) and the City's goals as set forth in the City's Envision San Jose 2040 General Plan. The policy establishes the thresholds for transportation impacts under CEQA removing transportation "Level of Service" (LOS) and replacing it with Vehicle Miles Traveled (VMT).

Findings:

a) Less than Significant Impact. The Traffic Operations Study found the proposed project is not anticipated to result in the addition of new school traffic to the school campus. Additionally, the proposed new buildings are not anticipated to generate new traffic on the adjacent streets during the peak hours. Therefore, the ACDS Master Plan would not have an effect on traffic conditions on the adjacent roadway network. The proposed improvements, however, would result in changes to the school's parking lot and pick-up/drop-off area, resulting in changes to vehicular access and circulation in the immediate vicinity of the school campus, as well as onsite circulation for both vehicles and pedestrians. ACDS shall implement all feasible recommendations contained in the report to improve circulation and safety for vehicles and pedestrians.

The traffic study lists existing school access measures that need to continue under Phase 1 and Master Plan buildout. The following are existing ACDS recommended school access and circulation measures / procedures that must continue to be implemented during the school's peak hours in order to continue to provide adequate site access/circulation operations. The drop-off area refers to the area adjacent to the school campus where student loading/unloading takes place, while the drop-off lane refers to the drive aisle that connects the Akio Way driveway to the drop-off area. These measures are illustrated on Figure 7 of the traffic study (Appendix B of this Initial Study) and some are also shown on the site plan as planned measures.

- Continue to implement existing site access procedures, with the required modifications
 as a result of the proposed new access driveway on Akio Way. This includes providing
 inbound access to the drop-off area via Akio Way and outbound access via Trinidad
 Drive. (Shown on the site plan)
- Continue the use of name cards displayed on the passenger side visor to help expedite pick-up procedures.
- Continue to prohibit left turns into the Akio Way driveway. This avoids conflicting
 movements at the Akio Driveway and prevents vehicular queues from forming along the
 eastbound direction of Akio Way.
- Continue to provide all access to the parking area via the Trinidad Drive two-way driveway. (Shown on the site plan)
- Continue to prohibit vehicular access between the parking lot and the drop-off lane. (Shown on the site plan)
- All parents/students walking or parking on the street must continue to access the school campus via the marked crosswalks and pathways, avoiding crossing mid-block or at unmarked locations.

 Continue to emphasize that no U-turns should be completed mid-block or at the intersection of Winterset Way/Akio Way.

Truck Access and Circulation

The proposed new site layout must continue to provide adequate access to larger vehicles, such as garbage trucks and emergency trucks. Trash collection most likely would occur on-site. The existing driveways on Trinidad Drive and Akio Way are both 32 feet wide, providing adequate width for larger vehicle access. Emergency vehicles could enter the site via the Trinidad Drive or the Akio Way driveways to access the parking lot, drop-off area, and the school campus. The proposed new driveway on Akio Way, which also would provide direct access to the fire lane, must be designed to accommodate larger vehicle traffic access and circulation, including adequate width and turn radii.

Truck Access and Circulation Recommendations

 All site driveways and drive aisles must be designed to the satisfaction of City of San Jose design guidelines, including the minimum required width for adequate emergency vehicle access.

It is recommended that the east side of the fire lane (north of the proposed new Akio Way driveway) include red-curb markings and signage prohibiting the parking/stopping of vehicles along this side of the fire lane (parking spaces are located along the west side of the fire lane).

The project is consistent with General Plan policies listed above through the provision of adequate and safe pedestrian and bicycle access, circulation, and facilities.

The project is the implementation of a Master Plan to improve an existing school site to replaced aged structures that were originally built in the 1960s and no longer serve the school well. The project would serve the current enrollment without providing for increased capacity. The project includes improvements to provide additional parking and improve on-site circulation and pedestrian safety. The school encourages carpooling through use of a student information system that allow families to search for other families near them who are willing to carpool. ACDS intends to implement an incentive-based system to reward staff who carpool, bike, or walk to campus. The project shall comply with all City code requirements to provide for adequate parking, bicycle facilities, and pedestrian facilities.

- b) Less than Significant Impact. The project implements master plan improvements to renovate an existing private school campus without changing overall capacity for enrollment. Vehicle miles traveled (VMT) is based on trip generation rates and trip length. The project is the renovation of an existing school campus and does not include an increase in capacity or enrollment. Therefore, trip generation rates, number of peak hour trips, or trip lengths are not anticipated to change as a result of the project and a TA or VMT study is not required. The project does not change the existing land use on site and therefore no significant impacts related to VMT are anticipated.
- c) Less than Significant Impact. New and modified driveways from Trinidad Drive and Aiko Way are proposed as part of the project. These new access ways, on site circulation patterns, and lane widths have been reviewed by a qualified transportation consultant (Hexagon Transportation) as well as the City's Public Works and Fire Departments for adequacy and the plans revised according to their comments. The traffic operations study makes recommendations for safe circulation patterns through all phases of the master plan (see Appendix B) which ACDS will incorporate into the future design plans of each phase.

d) Less Than Significant Impact. As mentioned above, the project plans have been reviewed by the City Public Works and Fire Department for adequate emergency access and the plans were revised accordingly to ensure emergency access is provided to department standards.

4.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resources, 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.				

Findings

a) Less than Significant Impact. As stated previously in the Cultural Resources Section, the CHRIS search showed no previously known archaeological resources within the project boundary. However, three archaeological resource locations were shown within the 0.25-mile study area surrounding the site. The State Lands File search was returned with negative results for the project area.

Examination of historic maps shows that a now defunct watercourse, feeding into Alamitos Creek, once ran across the project site (shown clearly on the Los Gatos 1940 USGS map). Native American burials and other resources in the Bay Area are often found near streams or water sources. Previous development in the project vicinity south of the creek has not discovered archaeological resources and the portion of the campus that would be redeveloped as part of the Master Plan implementation is already largely disturbed and developed with existing pavement, walkways, and or buildings.

There are no known Tribal Cultural Resources (TCRs) on the project site. The likelihood of encountering cultural resources, including TCRs during construction is considered moderate to low because of the project's proximity to an ancient water course the area. Therefore, there is a potential for TCRs to exist in the project impact area. Disturbance of TCRs would constitute a significant impact.

Some Native American artifacts may not be considered unique archaeological resources under the CEQA Guidelines (i.e. there is not a demonstrable public interest in that information, it does not possess a special and particular quality such as being the oldest of its type or the best available example of its type, and it is not directly associated with a scientifically recognized important prehistoric event or person). However, it is possible for a lead agency to determine that an artifact is considered to be significant to a local tribe, and therefore be considered a significant resource under CEQA. BMPs included as part of the project description include language that all Native American artifacts are to be considered significant until the lead agency has had enough evidence to determine an artifact not significant. This ensures that the default assumption is that all Native American artifacts are significant resources under CEQA until evidence proves otherwise.

Therefore, in order to safeguard unknown, buried, cultural resources, and tribal cultural resources, the following Standard Conditions of Approval are included as part of the project:

If prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped, the Director of Planning, Building and Code Enforcement (PBCE) or the Director's designee and the City's Historic Preservation Officer shall be notified, and a qualified archaeologist shall examine the find. The archaeologist shall 1) evaluate the find(s) to determine if they meet the definition of a historical or archaeological resource; and (2) make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits. Recommendations could include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery shall be submitted to Director of PBCE or the Director's designee and the City's Historic Preservation Officer and the Northwest Information Center (if applicable). Project personnel shall not collect or move any cultural materials.

If any human remains are found during any field investigations, grading, or other construction activities, all provisions of California Health and Safety Code Sections 7054 and 7050.5 and Public Resources Code Sections 5097.9 through 5097.99, as amended per Assembly Bill 2641, shall be followed. If human remains are discovered during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The project applicant shall immediately notify the Director of Planning, Building and Code Enforcement (PBCE) or the Director's designee and the qualified archaeologist, who shall then notify the Santa Clara County Coroner. The Coroner will make a determination as to whether the remains are Native American. If the remains are believed to be Native American, the Coroner will contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then designate a Most Likely Descendant (MLD). The MLD will inspect the remains and make a recommendation on the treatment of the remains and associated artifacts. If one of the following conditions occurs, the landowner or his authorized representative shall work with the Coroner to reinter the Native American human remains and associated grave goods with appropriate dignity in a location not subject to further subsurface disturbance:

- The NAHC is unable to identify a MLD or the MLD failed to make a recommendation within 48 hours after being given access to the site.
- The MLD identified fails to make a recommendation; or
- The landowner or his authorized representative rejects the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner.

4.19 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?				
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate 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?				
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			\boxtimes	

Setting

The Master Plan contains a preliminary assessment of all utilities and services at the school including an electrical assessment of the lighting system, fire alarm, public address and clock system, and telephone/data cabling system, mechanical assessment for general HVAC systems, and a plumbing assessment (see discussion in Project Description). Recommendations were made according to general categories including health and safety issues (structural, code compliance and accessibility, life safety, health and sanitation, and student safety issues), building preservation and energy use (building deterioration, energy usage, utility capacity to accommodate current use standards, and building and property security issues), and programmatic improvements (aesthetic issues for new buildings, occupant comfort (temperature and acoustics), data systems for current technology standards).

General site recommendations include:

 Health and Safety Issues such as American with Disabilities Act (ADA) compliance signage, paths, and paving; gas safety seismic shutoff valve; new fire alarm panel; new campus intercom system, new parking lot lighting, playground boxes, surfaces and equipment, and upgrade PG&E transformer.

- Building Preservation issues including new/replacement roofing, new replacement light fixtures with high efficiency LED lighting, ground main electrical panel and distribute grounding to subpanels, add energy management system to HVAC and lighting systems, add security motion detectors and cameras, replace framing and covering at shade structure.
- Programmatic Improvements including, painting, flooring, data system upgrade (new main data frame and intermediate data frames), roof-mounted HVAC with visual screen and new ductwork or new through wall AC units.

Findings:

- a) through c), No Impact. The proposed project is an infill redevelopment project to renovate school buildings and facilities for an existing school use on site. The project would not increase student enrollment above the recent historical maximum as a result of the Master Plan and the site is in a developed area with existing utility service connection. The project is not required to obtain a permit to discharge wastewater. Upgraded utility connections for power and gas are planned as part of Phase I improvements. Because there is no anticipated increase in enrollment or employment at the site no significant changes in overall utility usage is expected and would not require or result in the construction or expansion of new, off-site, water or wastewater treatment facilities, stormwater drainage, electric power, natural gas, telecommunication facilities, or waste disposal facilities.
- d) through e), Less than Significant Impact. The proposed project is consistent with the general plan designation of the site and therefore, would have a less than significant impact on solid waste. The proposed project would comply will all federal, state, and local statues and regulations related to solid waste. The project is required to comply with the City's Construction and Demolition Diversion (CDD) program which ensures that at least 75% of construction and demolition debris is recovered and diverted from landfills.

4.20 WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
Is the project located near state responsibility areas or lands classified as very high fire hazard severity zones?	⊠ Yes		No		
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				\boxtimes	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				\boxtimes	
c) Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				\boxtimes	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				\boxtimes	

Findings

a) through d), No Impact. The project site is located in a Local Responsibility Area (Cal Fire 2007), and near a State Responsibility Area, but is not located in a Very High Fire Hazard Severity Zone (Cal Fire 2008). The school use has occupied the site since the original buildings were constructed in the 1960s. New construction as part of the Master Plan would be confined to the existing flat, developed school site, adhere to the current California building code standards at the time the buildings are constructed, and would be subject to review and approval by the California Division of the State Architect (DSA). The California Building Code include standards for energy efficiency and wildfire hazards. Due to the already developed site and developed surrounding neighborhood, the project would not exacerbate wildfire risks in the area and does not require the installation of associated infrastructure such as roads, fuel breaks, emergency water sources, power lines or other utilities. As stated previously, the project is located in a Wildland Urban Interface (WUI) Area. The proposed Phase I building design includes WUI building standards and the design plans have been approved by DSA. Subsequent building plans developed for future phases of the Master Plan would also be subject to the WUI building standards and approval by DSA. The project is required to comply with C.3 development standards which require any new development to maintain the existing perviousness, not increase stormwater quantities or rates and incorporate low impact development measures, therefore changes in drainage are not anticipated affecting downstream risks.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means the incremental effects of a project are considerable when viewed in connection with the efforts of past projects, the effects of other current projects, and the effects of probable future projects)?			\boxtimes	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			\boxtimes	

Findings

a) Less than Significant Impact. The project site does not contain habitat for special status species, sensitive natural communities, wetlands, or riparian resources. BMPs and Standard Conditions of Approval would prevent impacts to migratory birds. BMP measures incorporated into the project would also prevent impacts to known cultural and tribal resources adjacent to project construction, previously unknown cultural resources, and unknown human remains.

Construction of the proposed project would generate criteria air pollutant emissions from fuel combustion in heavy-duty construction equipment, motor vehicles, and area sources such as landscaping equipment, etc. Air quality BMPs have been incorporated into the project to reduce these impacts to less than significant.

Therefore, with the implementation of the BMPs and Standard Conditions of Approval specified above in Section 3.10, the proposed project would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

b) Less Than Significant Impact. The proposed project would consist of the implementation of a Master Plan to renovate the ACDS campus, over time, and allow the continued operation and use of the site as a private school. The project would generate limited project specific impacts, primarily related to temporary construction impacts but they would not be cumulatively

considerable and BMPs and Standard Conditions of Approval would be implemented to to ensure impacts remain less than significant. This impact would be less than significant.

c) Less Than Significant Impact. The project avoids potentially significant impacts on biological resources, cultural/tribal cultural resources, noise and air quality during construction through the use of Best Management Practices and Standard Conditions of Approval that are included as part of the project to ensure impacts remain less than significant. The project would have a less than significant impact on all other resource areas.

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Chapter 5. List of Preparers

MIG, Inc.

2635 North 1st Street, Suite 149 San José, CA 95134 (650) 327-0429 www.migcom.com

Environmental Analysis and Document Preparation

Barbara Beard – Senior Project Manager Christina Lau – Senior Analyst Robert Templar – Analyst III Becca Dannels – GIS Specialist APPENDIX A
Noise Impact Analysis for the
Almaden Country Day School Master Plan
MIG, Inc.

Almaden Country Day School Master Plan

Noise Impact Analysis

April 2020

Prepared for:

Almaden Country Day School 6835 Trinidad Drive San Jose, California 95120

Prepared by:

MIG 2055 Junction Avenue, Suite 205 San Jose, California 95131





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Appendix A: Technical Noise Data

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List of Acronyms, Abbreviations, and Symbols					
Acronym / Abbreviation	Full Phrase or Description				
ACDS	Almaden Country Day School				
Caltrans	California Department of Transportation				
CCR	California Code of Regulations				
CEQA	California Environmental Quality Act				
CNEL	Community Noise Equivalent Level				
dB	Decibels (unweighted)				
dBA	Decibels (A-weighted)				
dBV	Velocity Decibels				
DNL	Day-Night Average Noise Level				
FHWA	Federal Highway Administration				
FTA	Federal Transit Administration				
HVAC	Heating, Ventilation, and Air Conditioning				
Hz	Hertz				
In/Sec	Inches per Second				
Leq	Continuous Equivalent Noise Level				
LT	Long-Term				
OITC	Outdoor Indoor Transmission Class				
P.E.	Physical Education				
PRC	Public Resources Code				
PQP	Public, Quasi-Public				
SJUSD	San Jose Unified School District				
SR	State Route				
ST	Short-Term				
STC	Sound Transmission Class				
SUP	Special Use Permit				

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EXECUTIVE SUMMARY

This Noise Impact Assessment Report (Report) evaluates the potential noise impacts associated with the construction and operation of the Almaden Country Day School Campus Master Plan Project (proposed Project) located at 6835 Trinidad Drive in the City of San Jose, Santa Clara County, California 95120.

This Report is consistent with the requirements specified in the City of San Jose Municipal Code and Envision 2040 General Plan Environmental Leadership Element (City of San Jose 2018, 2019). This Report is intended to assist the California Environmental Quality Act (CEQA) Lead Agency (City of San Jose) with its review of potential Project-related noise impacts in compliance with CEQA (Public Resources Code (PRC) §21000 et seq.) and the CEQA Guidelines (14 CCR §15000 et seq.), particularly in respect to the noise issues identified in Appendix G of the CEQA Guidelines. This Report does not make determinations of significance pursuant to CEQA because such determinations are solely the purview of the CEQA Lead Agency.

S.1 Proposed Project Description

The Almaden Country Day School (ACDS) is applying to the City of San Jose for a rezoning and Special Use Permit for approval of a master plan improvement project at the existing ACDS Campus. The project consists of improvements to the existing ACDS, located at 6835 Trinidad Drive in San Jose. ACDS leases a closed school site from the San Jose Unified School District (SJUSD) and the buildings are aging and no longer serve the ACDS well. The SJUSD has given ACDS permission to remodel the campus through the implementation of the proposed Campus Master Plan. The project would remove existing school buildings at the site and redevelop the site with new school buildings, add a new multipurpose building, and reconfigure the driveways, drop-off and pick-up zones, and parking lot. The proposed Campus Master Plan would be implemented in four phases over the next approximately 15 years.

The proposed Project would involve construction and operational activities that would generate noise from equipment use, vehicle trips, and other sources of noise.

S.2 POTENTIAL CONSTRUCTION NOISE AND VIBRATION IMPACTS

The proposed Project's construction noise and vibration levels were estimated using published noise data from the California Department of Transportation (Caltrans) and Federal Highway Administration (FHWA). Estimated construction noise levels were analyzed at adjacent property lines and at sensitive noise receptor locations, including residential receptors west of the ACDS, along Trinidad Drive; south of the ACDS, along Akio Way; and east of the ACDS, along Winterset Way.

Implementation of the proposed Campus Master Plan would result in four construction phases anticipated to last approximately 12 to 15 months each over the next approximately 15 years. Worst-case

¹ The City requires rezoning the property from R-1-5 to Public, Quasi-Public (PQP) and the issuance of a Special Use Permit for the private school use.

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noise levels could range from approximately 75 dBA to 85 dBA at nearby sensitive receptor locations depending on the phase and activity being undertaken. The City of San Jose does not have established maximum construction noise level limitations; however, General Plan Policy EC-1.7 requires construction projects within 500 feet of residential land uses to prepare a Construction Noise Logistics Plan if the project would involve substantial noise generating activities for 12 or more months. In addition, City Municipal Code Section 20.100.450 limits construction activities occurring within 500 feet of a residence to the hours of 7 AM to 7 PM, Monday through Friday, unless alternative hours are expressly allowed in a development permit or other planning approval.

MIG recommends the proposed Project implement Mitigation Measure NOI-1, which requires the preparation of a Construction Noise Logistics Plan prior to beginning construction activity for any Campus Master Plan phase. At a minimum, the Construction Noise Logistics Plan should specify the hours of construction, noise and vibration minimization measures, posting or notification of construction schedule, and the designation of a noise disturbance coordinator who would respond to neighborhood complaints.

The proposed Project's demolition, site preparation, grading, and other construction activities that could result in ground-borne vibration would occur at least 25 feet from any adjacent structure. At this distance, potential construction-related groundborne vibration levels would likely be perceptible at residential structures adjacent to the Project site's eastern property line; however, these vibration levels would not be excessive, because any equipment operation near property lines would be short in duration, intermittent (lasting only a few hours or days in work areas near property lines), and would not result vibration levels that could cause structural damage.

S.3 POTENTIAL OPERATIONAL NOISE IMPACTS

Once constructed, the proposed Project would generate noise from parking activities and heating, ventilation, and air conditioning (HVAC) equipment. The potential increase in noise resulting from these activities was estimated using the guidance and recommendations contained in the *Caltrans Technical Noise Supplement* (Caltrans, 2013a), Federal Transit Administration's *Transit Noise and Vibration Impact Assessment Handbook* (FTA, 2006), and available manufacturer's data for HVAC noise levels.

Estimates of the proposed Project's operational noise levels indicate the Project would not generate noise levels that increase the ambient noise environment by more than 3.0 DNL at any nearby sensitive receptor location with an existing ambient noise level of "Normally Acceptable," as defined in Policy EC-1.2 City's General Plan. In addition, the proposed Project would be located in an ambient noise environment that is consistent with the City's land use compatibility guidelines for public and quasi-public land uses (e.g., schools).

Although operation of the proposed project would not result in a 3 DNL increase at any nearby receptor locations, activities associated with motor-vehicle operation in the campus' southeastern boundary have the potential to conflict with the 55 dBA Lmax noise level limitation established in Section 20.40.6500 of the City's Municipal Code. Accordingly, the project would incorporate Project Design Feature-1 (PDF-1) to reduce potential noise levels from vehicular activity in the southeastern parking lot. PDF-1 would require ACDS to install a permanent, 6-foot tall, concrete barrier along the campus' property line with residential land uses on Winterset Way. The concrete wall should be installed at the beginning of Phase 2 to initially help shield sensitive receptor locations from construction noise, also in addition to reducing operational noise associated with parking lot operation.

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S.4 AIRPORT-RELATED NOISE

The proposed Project site is located approximately 10 miles south of the San Jose International Airport. The proposed Project is not within an airport influence area and would not expose students or staff to excessive public or private airport-related noise.

S.5 RECOMMENDED MITIGATION MEASURES AND PROJECT DESIGN FEATURES

Since the proposed Project could conflict with City General Plan Policy EC-1.7 and Municipal Code Section 20.40.6500, MIG recommends the inclusion of the following mitigation measure and Project Design Feature (PDF), respectively:

Mitigation Measure NOI-1: Consistent with City of San Jose General Plan Policy EC-1.7, the ACDS and/or its designated contractor shall prepare a Construction Noise Logistics Plan (CNLP) prior to the start of any construction activities associated with the ACDS Campus Master Plan. The CNLP shall apply to all phases of master plan development and shall:

- Designate an ACDS employee and/or contractor's representative to serve as a noise disturbance coordinator responsible for receiving noise complaints and resolving constructionnoise related issues.
- Include procedures describing how the noise disturbance coordinator will receive, respond to, and resolve construction noise complaints. At a minimum, upon receipt of a noise complaint, the Contractor and/or ACDS representative described in the first sub-bullet above shall identify the noise source generating the complaint, determine the cause of the complaint, and take steps to resolve the complaint.
- Restrict construction work hours to the hours specified in City of San Jose Municipal Code Section 20.11.450 (7:00 AM to 7:00 PM, Monday through Friday)
- Require construction staging areas to be established in locations that create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project sure during all project construction
- Provide notice (at least 10 days prior to the start of construction activities) to all adjacent
 residences that describes the approximate start date and schedule for the construction activities and a
 contact name and phone number for the construction contractor and/or ACDS staff person responsible
 for handling construction-related noise complaints. The notice shall also identify periods of peak
 construction activities and noise levels (e.g., grading activities, foundation work, etc.).
- Specify the noise and vibration minimization measures that will be undertaken during the construction phase to reduce construction-related noise levels. Such measures may include, but are not limited to:
 - Equipping all internal combustion engine-drive equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment being controlled
 - Prohibiting unnecessary idling of internal combustion engines (i.e., idling should generally be limited to no more than five minutes)
 - Using hydraulically or electrically powered impact tools (e.g., jack hammer) to avoid noise associated with compressed air exhaust from pneumatically powered tools, if feasible
 - Reducing noise from pneumatic tools through the use of a noise suppression device on the

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compressed air exhaust

 Connecting to existing electrical service at the site to avoid the use of stationary, diesel- or other alternatively-fueled power generators

- Locating stationary noise-generating equipment such as pumps, compressors, and welding machines as far from sensitive receptor locations as practical. If such equipment must be located near receptors, provide shielding in the form of a three-sided sound enclosure (with a full or partial roof) that provides for proper ventilation, equipment operation, and effective noise control.
- Phasing demolition and construction activities to take advantage of noise shielding provided by existing structures (i.e., start from the side of the building the farthest away from nearby sensitive receptors).
- Prohibiting noise from radios or other amplified sound devices to be audible beyond the property line of the construction site.

Project Design Feature-1: Prior to any construction activities associated with Phase 2 of the Campus Master Plan, the ACDS shall install a permanent, concrete barrier along the entire portion of the proposed Project's southeastern parking lot. The barrier shall be constructed free of openings or gaps and have a minimum rated transmission loss value of 25 dBA (or higher). The design of this barrier would reduce noise levels between the southeastern parking lot and the residential property line by 15 dBA (or more).

The implementation of Mitigation Measure NOI-1 would ensure all project construction activities associated with implementation of the Campus Master Plan are consistent with General Plan Policy EC-1.7. The Construction Noise Logistics Plans that would be prepared pursuant to this mitigation measure would specify the hours of construction, noise and vibration minimization measures that would be implemented, posting or notification of a construction schedule, and the designation of a noise disturbance coordinator who would respond to neighborhood complaints.

The implementation of PDF-1 would serve to reduce vehicle-related noises that would be generated in the ACDS Campus' southeastern parking lot to levels consistent with Municipal Code Section 20.40.6500. Based on MIG's noise monitoring conducted during morning drop-off activities, a concrete wall installed along the campus' eastern property line that reduces noise levels by 15 dBA would be sufficient to meet the City's maximum noise level limitation of 55 dBA Lmax at the adjacent property line with residences along Winterset Way.

1 INTRODUCTION

The Almaden Country Day School (ACDS) has submitted an application for a rezoning and Special Use Permit (SUP) to the City of San Jose (City) for its proposed Almaden Country Day School Campus Master Plan (proposed Project). The proposed Project would be located at 6835 Trinidad Drive, in the southern portion of San Jose, in Santa Clara County, and include redevelopment of the site with new school buildings, the addition of a new, multipurpose building, and reconfiguration of driveways, drop-off and pick-up zones, and parking lots. Figure 1-1 depicts the regional setting of the proposed Project.

The proposed Project would be constructed in four phases over the next approximately 15 years, with each phase lasting approximately five years, based on available funding. Project development would involve construction and operational activities that would generate noise that would affect the surrounding environment.

MIG, Inc. (MIG) prepared this Noise Impact Assessment Report (Report) at the request of ACDS. This Report evaluates the potential construction- and operations-related noise impacts of the proposed Project using Project-specific information contained in the proposed site plan and ACDS Operational Plan that will be submitted to the City as part of the SUP application. Where necessary, MIG has supplemented available information with standardized sources of information, such as model assumptions pertaining to construction equipment activity levels. In general, this Report evaluates the potential "worst-case" conditions associated with the proposed Project's construction and operational noise levels to ensure a conservative (i.e., likely to overestimate) assessment of potential noise impacts is presented.

This Report is intended for use by the Lead Agency to assess the potential noise and vibration impacts of the proposed Project in compliance with the California Environmental Quality Act (CEQA; PRC §21000 et seq.) and the State CEQA Guidelines (14 CCR §15000 et seq.), particularly in respect to the noise and vibration issues identified in Appendix G of the State CEQA Guidelines. This report does not make determinations of significance pursuant to CEQA because such determinations are solely the purview of the Lead Agency.

1.1 REPORT ORGANIZATION

This Report is organized as follows:

- Chapter 1, Introduction, explains the contents of this Report and its intended use.
- Chapter 2, Noise Fundamentals, provides pertinent background information on the measurement, propagation, and characterization of noise levels.
- Chapter 3, Environmental Setting, describes the existing noise setting of the proposed Project.
- Chapter 4, Regulatory Setting, provides information on the federal, state, and local regulations that govern the proposed Project's noise setting and potential noise impacts.
- Chapter 5, Proposed Project Description, provides an overview of construction and operational activities associated with the proposed Project.
- Chapter 6, Impact Assessment, identifies the potential construction and operational noise
 impacts of the proposed Project and evaluates these effects in accordance with Appendix G of
 the State CEQA Guidelines.
- Chapter 7, Report Preparers and References list the individuals involved, and the references used, in the preparation of this Report.

Page 1-2 Introduction This page intentionally left blank.

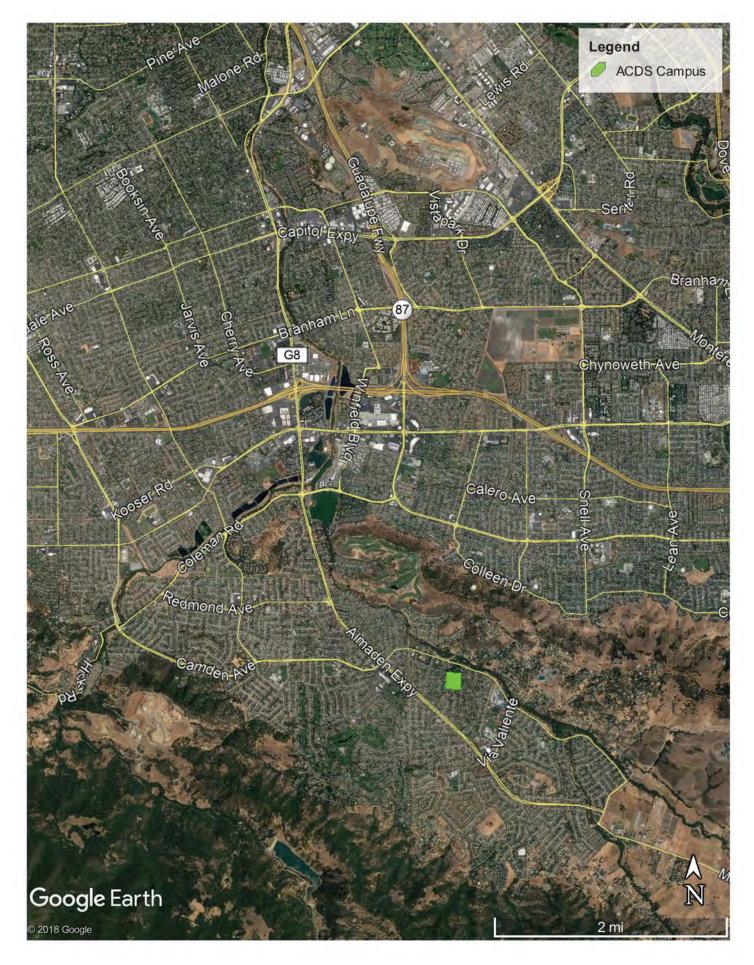


Figure 1-1 Regional Location

Page 1-4 Introduction This page intentionally left blank.

2.1 Defining Noise

"Sound" is a vibratory disturbance created by a moving or vibrating source and is capable of being detected. For example, airborne-sound is the rapid fluctuation of air pressure above and below atmospheric pressure. "Noise" may be defined as unwanted sound that is typically construed as loud, unpleasant, unexpected, or undesired by a specific person or for a specific area.

2.1.1 Sound Production

Sound has three properties: frequency (or pitch), amplitude (or intensity or loudness), and duration. Pitch is the height or depth of a tone or sound and depends on the frequency of the vibrations by which it is produced. Sound frequency is expressed in terms of cycles per second, or Hertz (Hz). Humans generally hear sounds with frequencies between 20 and 20,000 Hz and perceive higher frequency sounds, or high pitch noise, as louder than low-frequency sound or sounds low in pitch. Sound intensity or loudness is a function of the amplitude of the pressure wave generated by a noise source combined with the reception characteristics of the human ear. Atmospheric factors and obstructions between the noise source and receptor also affect the loudness perceived by the receptor.

The frequency, amplitude, and duration of a sound all contribute to the effect on a listener, or receptor, and whether or not the receptor perceives the sound as "noisy" or annoying. Despite the ability to measure sound, human perceptibility is subjective, and the physical response to sound complicates the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as "noisiness" or "loudness."

2.1.2 Measuring Sound

Sound pressure levels are typically expressed on a logarithmic scale in terms of decibels (dB). A dB is a unit of measurement that indicates the relative amplitude (i.e., intensity or loudness) of a sound, with 0 dB corresponding roughly to the threshold of hearing for the healthy, unimpaired human ear. Since decibels are logarithmic units, an increase of 10 dBs represents a ten-fold increase in acoustic energy, while 20 dBs is 100 times more intense, 30 dBs is 1,000 times more intense, etc. In general, there is a relationship between the subjective noisiness or loudness of a sound and its intensity, with each 10 dB increase in sound level perceived as approximately a doubling of loudness. Due to the logarithmic basis, decibels cannot be directly added or subtracted together using common arithmetic operations:

$$50 \ decibels + 50 \ decibels \neq 100 \ decibels$$

Instead, the combined sound level from two or more sources must be combined logarithmically. For example, if one noise source produces a sound power level of 50 dBA, two of the same sources would combine to produce 53 dB as shown below.

$$10 * 10 \log \left(10^{\left(\frac{50}{10}\right)} + 10^{\left(\frac{50}{10}\right)}\right) = 53 \ decibels$$

In general, when one source is 10 dB higher than another source, the quieter source does not add to the sound levels produced by the louder source because the louder source contains ten times more sound energy than the quieter source.

Page 2-2 Noise Fundamentals

2.1.3 Characterizing Sound

Although humans generally can hear sounds with frequencies between 20 and 20,000 Hz most of the sound humans are normally exposed to do not consist of a single frequency, but rather a broad range of frequencies perceived differently by the human ear. In general, humans are most sensitive to the frequency range of 1,000–8,000 Hz and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. Instruments used to measure sound, therefore, include an electrical filter that enables the instrument's detectors to replicate human hearing. This filter known as the "A-weighting" or "A-weighted sound level" filters low and very high frequencies, giving greater weight to the frequencies of sound to which the human ear is typically most sensitive. Most environmental measurements are reported in dBA, meaning decibels on the A-scale.

Sound levels are usually not steady and vary over time. Therefore, a method for describing either the average character of the sound or the statistical behavior of the variations over a period of time is necessary. The continuous equivalent noise level (Leq) descriptor is used to represent the average character of the sound over a period of time. The Leq represents the level of steady-state noise that would have the same acoustical energy as the sum of the time-varying noise measured over a given time period. Leq is useful for evaluating shorter time periods over the course of a day. The most common Leq averaging period is hourly, but Leq can describe any series of noise events over a given time period.

Variable noise levels are the values that are exceeded for a portion of the measured time period. Thus, the L1, L5, L10, L25, L50, and L75 descriptors represent the sound levels exceeded 1%, 5%, 10%, 25%, 50%, and 75% of the time the measurement was performed.

When considering environmental noise, it is important to account for the different responses people have to daytime and nighttime noise. In general, during the nighttime, background noise levels are generally quieter than during the daytime but also more noticeable due to the fact that household noise has decreased as people begin to retire and sleep. Accordingly, a variety of methods for measuring noise have been developed. The California General Plan Guidelines for Noise Elements identifies the following common metrics for measuring noise:

- Day-Night Average Level (DNL or L_{dn}): The average equivalent A-weighted sound level during a 24-hour day, divided into a 15-hour daytime period (7 AM to 10 PM) and a 9-hour nighttime period (10 PM to 7 AM). A 10 dB "penalty" is added to measure nighttime noise levels when calculating the 24-hour average noise level. For example, a 45-dBA nighttime sound level (e.g., at 2 AM) would contribute as much to the overall day-night average as a 55-dBA daytime sound level (e.g., at 7 AM).
- Community Noise Equivalent Level (CNEL): The CNEL descriptor is similar to DNL, except
 that it includes an additional 5 dBA penalty for noise events that occur during the evening time
 period (7 PM to 10 PM). For example, a 45-dBA evening sound level (e.g., at 8 PM) would
 contribute as much to the overall day-night average as a 50-dBA daytime sound level (e.g. at 8
 AM).

The artificial penalties imposed during DNL and CNEL calculations are intended to account for a receptor's increased sensitivity to noise levels during quieter nighttime periods. As such, the DNL and CNEL metrics are usually applied when describing longer-term ambient noise levels because they account for all noise sources over an extended period of time and account for the heightened sensitivity of people to noise during the night. In contrast, the Leq metric is usually applied to shorter reference periods where sensitivity is presumed to remain generally the same.

Noise Fundamentals Page 2-3

Federal and State agencies have established noise and land use compatibility guidelines that use averaging approaches to noise measurement. The State Department of Aeronautics and the California Commission on Housing and Community Development have adopted the CNEL for evaluating community noise exposure levels.

2.1.4 Sound Propagation

The energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out and travels away from the noise generating source. The strength of the source is often characterized by its "sound power level." Sound power level is independent of the distance a receiver is from the source and is a property of the source alone. Knowing the sound power level of an idealized source and its distance from a receiver, sound pressure level at the receiver point can be calculated based on geometrical spreading and attenuation (noise reduction) as a result of distance and environmental factors, such as ground cover (asphalt vs. grass or trees), atmospheric absorption, and shielding by terrain or barriers.

For an ideal "point" source of sound, such as mechanical equipment, the energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out in a spherical pattern and travels away from the point source. Theoretically, the sound level attenuates, or decreases, by 6 dB with each doubling of distance from the point source. In contrast, a "line" source of sound, such as roadway traffic or a rail line, spreads out in a cylindrical pattern and theoretically attenuates by 3 dB with each doubling of distance from the line source; however, the sound level at a receptor location can be modified further by additional factors. The first is the presence of a reflecting plane such as the ground. For hard ground, a reflecting plane typically increases A-weighted sound pressure levels by 3 dB. If some of the reflected sound is absorbed by the surface, this increase will be less than 3 dB. Other factors affecting the predicted sound pressure level are often lumped together into a term called "excess attenuation." Excess attenuation is the amount of additional attenuation that occurs beyond simple spherical or cylindrical spreading. For sound propagation outdoors, there is almost always excess attenuation, producing lower levels than what would be predicted by spherical or cylindrical spreading. Some examples include attenuation by sound absorption in air; attenuation by barriers; attenuation by rain, sleet, snow, or fog; attenuation by grass, shrubbery, and trees; and attenuation from shadow zones created by wind and temperature gradients. Under certain meteorological conditions, like fog and low-level clouds, some of these excess attenuation mechanisms are reduced or eliminated due to noise reflection.

2.1.5 Noise Effects on Humans

Noise effects on human beings are generally categorized as:

- Subjective effects of annoyance, nuisance, and/or dissatisfaction
- Interference with activities such as speech, sleep, learning, or relaxing
- Physiological effects such as startling and hearing loss

Most environmental noise levels produce subjective or interference effects; physiological effects are usually limited to high noise environments such as industrial manufacturing facilities or airports. Predicting the subjective and interference effects of noise is difficult due to the wide variation in individual thresholds of annoyance and past experiences with noise; however, an accepted method to determine a person's subjective reaction to a new noise source is to compare it the existing environment without the noise source, or the "ambient" noise environment. In general, the more a new noise source exceeds the ambient noise level, the more likely it is to be considered annoying and to disturb normal activities.

Page 2-4 Noise Fundamentals

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1-dB changes in sound levels when exposed to steady, single-frequency ("pure-tone") signals in the mid-frequency (1,000–8,000 Hz) range. In typical noisy environments, changes in noise of 1 to 2 dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness that would almost certainly cause an adverse response from community noise receptors.

When exposed to high noise levels, humans may suffer hearing damage. Sustained exposure to high noise levels (e.g., 90 dBs for hours at a time) can cause gradual hearing loss, which is usually temporary, whereas sudden exposure to a very high noise level (e.g., 130 to 140 dBs) can cause sudden and permanent hearing loss. In addition to hearing loss, noise can cause stress in humans and may contribute to stress-related diseases, such as hypertension, anxiety, and heart disease (Caltrans, 2013a).

2.2 VIBRATION AND GROUNDBORNE NOISE

Vibration is the movement of particles within a medium or object such as the ground or a building. Vibration may be caused by natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or humans (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources are usually characterized as continuous, such as factory machinery, or transient, such as explosions.

As is the case with airborne sound, groundborne vibrations may be described by amplitude and frequency; however, unlike airborne sound, there is no standard way of measuring and reporting amplitude. Vibration amplitudes can be expressed in terms of velocity (inches per second) or discussed in dB units in order to compress the range of numbers required to describe vibration². Vibration impacts to buildings are usually discussed in terms of peak particle velocity (PPV) in inches per second (in/sec). PPV represents the maximum instantaneous positive or negative peak of a vibration signal and is most appropriate for evaluating the potential for building damage. Vibration can impact people, structures, and sensitive equipment. The primary concern related to vibration and people is the potential to annoy those working and residing in the area. Vibration with high enough amplitudes can damage structures (such as crack plaster or destroy windows). Groundborne vibration can also disrupt the use of sensitive medical and scientific instruments, such as electron microscopes.

Common sources of vibration within communities include construction activities and railroads. Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities. Next to pile driving, grading activity has the greatest potential for vibration impacts if large bulldozers, large trucks, or other heavy equipment are used.

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² As with airborne sound, the groundborne velocity can also be expressed in decibel notation as velocity decibels, or dBV (FTA, 2006). The vibration of floors and walls may cause perceptible vibration, rattling of items such as windows or dishes on shelves, or a low-frequency rumble noise, referred to as groundborne noise. This Report uses PPV to describe vibration effects.

3.1 Project Location and Site Description

The ACDS Campus is located at 6835 Trinidad Drive in the City of San Jose, in Santa Clara County (see Figure 1-1). The campus consists of an approximately 9.13-acre school site developed with an elementary school building, multipurpose building, administration building, restroom buildings, and several modular buildings that serve as the middle school, coach offices, pre-kindergarten, locker room, and art, science, library, and computer center. Most of these buildings were constructed in 1965-66. The campus is bounded by Trinidad Drive to the west, Akio Way to the south, single-family homes along Winterset Way to the east, and Greystone Park to the north.

ACDS currently serves a student population of approximately 360 students, although it has served up to 425 students in the recent past. The intent of the Master Plan is to update and modernize the outdated school facilities, without any plans to increase overall enrollment.

The campus is currently zoned R-1-5, which is a residential zoning district with a maximum of 5 dwelling units per acre, and is designated Public, Quasi-Public (PQP) in the City's General Plan. The school site is within the Almaden Planning Area of the City's General Plan and is surrounded to the west, south, and east by residential land uses (designated "Residential Neighborhood" in the City's General Plan) and to the north by Graystone Park (designated "Open Space, Parklands and Habitat" in the City's General Plan).

The ACDS Campus is currently accessed via two driveways along Trinidad Drive (a two-way and an outbound only access driveway) and one driveway along Akio Way (inbound only access).

3.2 EXISTING NOISE AND VIBRATION ENVIRONMENT

As described in the City of San Jose's Envision 2040 General Plan Environmental Impact Report (EIR), the ambient noise conditions within the City of San Jose are predominantly the result of transportation-related noise sources. US 101, Interstate 280, 680, and 880, and State Routes 17, 82, 85, 87, and 237 are the most significant sources of traffic noise throughout the City. In areas that are more distant from highways, collector roadways and local streets are the primary noise sources at nearby land uses. Although the project site is not near any freeways or state routes, it is approximately 1,100 feet from Almaden Expressway.

The City's General Plan EIR identifies that Almaden Expressway between Camden Avenue and Redmond Avenue (the closest expressway segment to the ACDS Campus evaluated in the City's General Plan EIR) generates a noise level of 68 DNL at a distance of 75 feet from the center of the expressway under both 2008 and 2035 traffic conditions. Given the campus is more than 1,000 feet from Almaden Expressway and there are a number of residential structures that lie between the Expressway and the project site, the primary transportation noise sources influencing the ambient noise environment come from vehicular operation on local streets adjacent to the ACDS Campus, such as Trinidad Drive and Akio Lane.

3.2.1 Existing Ambient Noise Levels

Existing ambient noise measurement levels at the ACDS Campus were monitored from approximately 7:30 AM on Tuesday, December 10, 2019 to 4:00 PM on Wednesday, December 11, 2019. Ambient noise levels were measured with three, Larson Davis Model LxT, Type I, sound level meters. The meters' receiving microphones were set to a height of five feet above ground to approximate a human

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receptor. Noise monitoring was conducted in 10-minute intervals. Weather conditions on December 10, 2019 started off partly cloudy and progressed to cloudy as the day progressed. Light rainfall totaling approximately 0.05 inches occurred between the hours of 8:30 PM on December 10 and 4:00 AM on December 11. The daytime high temperatures were approximately 60 degrees and the nightly low was approximately 54 degrees.

The monitoring effort consisted of two long-term (LT) measurements (approximately 36 hours) and one short-term (ST) measurement (approximately 20 minutes) at locations selected to:

- Provide direct observations of existing noise sources in the vicinity of the proposed Project area (e.g., heating, ventilation, and air conditioning (HVAC) systems on the portable classroom buildings, students playing on the black top, morning drop-off activities, etc.);
- Determine the typical ambient noise levels in the proposed Project area and vicinity; and
- Evaluate the proposed Project's potential increase in noise levels at nearby sensitive receptor locations (see Section 3.3).

Ambient noise monitoring locations are described below.

- Location LT-1 was approximately 75 feet north of Akio Way, along the ACDS Campus'
 eastern boundary, near the property line shared with the single-family homes on Winterset
 Way. The ambient noise levels at LT-1 are considered representative of typical day- and nighttime noise levels near the southeastern portion of campus during school operation. The
 primary sources of noise at this location were from HVAC operation on the back of the Middle
 School portable classrooms and background noise from school operations (see Figure 5-2).
- Location LT-2 was approximately 280 feet north of Akio Way, along the ACDS Campus' eastern boundary, near the property line shared with the single-family homes on Winterset Way, east of the school's blacktop area. The ambient noise levels at LT-2 are considered representative of typical day and nighttime noise levels along the eastern portion of the ACDS Campus, near outdoor areas where students congregate / play during school operation. The primary sources of noise at this location were from HVAC operation on the back of the Middle School portable classrooms and students talking / playing on the blacktop.
- Location ST-1 was approximately 20 feet north of the campus' northern driveway on Trinidad
 Drive. Measurements were collected from 7:40 AM to 8:00 AM, and are considered
 representative of typical conditions during student pick-up and drop-off. The primary source of
 noise was from vehicular operation and students, parents, and faculty talking. Instantaneous
 increases in noise levels were observed when car doors closed.

The results of the ambient noise monitoring are summarized in Table 3-1. It is noted that measured ambient noise levels are a composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location. Please refer to Appendix A for detailed ambient noise monitoring results and data sheets.

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Tabl	e 3-1: Existin	ıg Ambi	ent Nois	se Levels (dBA) a	at the ACDS Cam	ous	
Maniforina				Hourly L _{eq} Range			
Monitoring Site	Duration	L _{min}	L _{max}	Daytime (7 AM - 7 PM)	Evening ^(A) (7 PM - 10 PM)	Nighttime (10 PM - 7 AM)	DNL ^(B)
LT-1	36 Hours	25.0	80.6	45.9 – 58.4	44.7 – 51.9	39.1 – 53.6	54.7
LT-2	36 Hours	24.8	88.0	43.0 – 62.3	43.5 – 48.1	37.8 – 53.6	55.9
ST-1	20 Minutes	47.2	72.9	56.0 – 57.4	N/A ^(C)	N/A ^(C)	N/A ^(C)

Source: MIG 2019 (see Appendix A)

- (A) Although the City of San Jose's land use compatibility metrics are based on the DNL 24-hour weighting descriptor (see Section 2.1.3), an evening noise range has been provided, since some activities would occur at the school during this time frame.
- (B) The DNL noise levels are based on the 24-hour period between 8:00 AM on December 10, 2019 and 8:00 AM on December 11, 2019.
- (C) Data is not available for these noise metrics because noise data was not collected for the time period in question or the noise metric was not available for use in this table.

As shown in Table 3-1, measured ambient noise levels were generally highest during the daytime at location LT-2. Traffic and other ambient sources of noise had a greater effect on LT-1 during the evening and nighttime hours. Noise levels associated with drop-off activities were generally constant during the two, 10-minute intervals. Car doors closing approximately 20 feet from the sound level meter generally produced noise levels of approximately 65 dBA. Although not shown in the data presented in Table 3-1, there was a large truck delivering water along the eastern portion of the ACDS Campus at approximately 3:30PM on December 10. At LT-1 it produced an Leq and Lmax of 76.6 and 94.2 dBA, respectively, during the 3:30 – 3:40 PM interval. At LT-2 it produced an Leq and Lmax of 76.2 and 95.2 dBA, respectively, during the 3:30 – 3:40 PM interval.

3.3 Noise-Sensitive Receptors

Noise sensitive receptors are buildings or areas where unwanted sound or increases in sound may have an adverse effect on people or land uses. Residential areas, hospitals, schools, and parks are examples of noise sensitive receptors that could be sensitive to changes in existing environmental noise levels. The noise sensitive receptors adjacent or in close proximity to the perimeter of the proposed Project include the single-family residential homes on Trinidad Drive, west of the project site; Akio Way, south of the project site; and Winterset Way, east of the project site.

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4.1 FEDERAL NOISE REGULATIONS

There are no federal regulations that directly apply to the proposed Project.

4.2 STATE NOISE REGULATIONS

4.2.1 California Building Standards Code

The California Building Standards Code is contained in Title 24 of the California Code of Regulations and consists of 11 different parts that set various construction and building requirements. Part 2, California Building Code, Section 1207, Sound Transmission, establishes sound transmission standards for interior walls, partitions, and floor/ceiling assemblies. Specifically, Section 1207.4 establishes that interior noise levels attributable to exterior noise sources shall not exceed 45 dBA DNL or CNEL (as set by the local General Plan) in any habitable room.

The California Green Building Standards Code is Part 11 to the California Building Standards Code. Chapter 5, Nonresidential Mandatory Standards, Section, establishes additional standards for interior noise levels.

- 5.507.4.1.1 sets forth that buildings exposed to a noise level of 65 dB Leq (1-hour) during any hour of operation shall have exterior wall and roof-ceiling assemblies exposed to the noise source meeting a composting sound transmission class (STC) rating of at least 45 (or an outdoor indoor transmission class (OITC) of 35, with exterior windows of a minimum STC of 40.
- Section 5.507.4.2 sets forth that wall and roof assemblies for buildings exposed to a 65 dBA Leq pursuant to Section 5.507.4.1.1, shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed 50 dBA Leq in occupied areas during any hour of operation.

4.3 LOCAL NOISE REGULATIONS

4.3.1 City of San Jose Municipal Code

Title 20 of the City of San Jose Municipal Code, Zoning, Chapter 40.470, Commercial Zoning Districts and Public/Quasi-Public (PQP) Zoning District, sets forth standards that apply to the proposed Project's potential operational noise sources. The purpose of these standards is to prevent activities and noise levels that are dangerous, obnoxious, or offensive, or that create a public or private nuisance. Table 20-105, Noise Standards, in Section 20.40.6500 establishes a maximum noise level limitation of 55 dBA at the property line for commercial or PQP use adjacent to a property use or zoned for residential purposes, unless the noise generated by the commercial or PQP use is in compliance with a special use permit as provided in Chapter 20.100 of the Municipal Code.

In addition, Section 20.100.450, Hours of Construction within 500 feet of a Residential Unit, limits construction activities to the hours of 7 AM to 7 PM, Monday through Friday, unless alternative hours are expressly allowed in a development permit or other planning approval.

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4.3.2 City of San Jose General Plan

The Environmental Leadership Element of the City of San Jose's Envision 2040 General Plan is designed to minimize the impact of noise on people through noise reduction and suppression techniques and land use policies (General Plan Goal EC-1). Table EC-1 of the General Plan identifies 60 dBA DNL as the normally acceptable exterior noise exposure level for residential land uses and 55 dBA DNL is the normally acceptable exterior noise exposure level for public and quasi-public land uses.

The Envision 2040 General Plan also contains the following noise and vibration policies that apply to the proposed project:

- EC -1.1: Locate new development in areas where noise levels are appropriate for the proposed uses. Consider federal, state, and City noise standard and guidelines as part of new development review.
- EC-1.2: Minimize the noise impacts of new development on land uses sensitive to increased noise levels by limiting noise generation and by requiring the use of noise attenuation measures such as acoustical enclosures and sound barriers, where feasible. The City considers significant noise impacts to occur if a project would:
 - Cause the DNL at noise sensitive receptors to increase by five dBA DNL or more where the noise levels would remain "Normally Acceptable"; or
 - Cause the DNL at noise sensitive receptors to increase by three dBA DNL or more where noise levels would equal or exceed the "Normally Acceptable" level.
- EC-1.3: Mitigate noise generation of new nonresidential land uses to 55 dBA DNL at the property line when located adjacent to existing or planned noise sensitive residential and public/quasi-public land uses.
- EC-1.7: Require construction operations within San Jose to use best available noise suppression devices and techniques and limit construction hours near residential uses per the City's Municipal Code. The City considers significant construction noise impacts to occur if a project located within 500 feet of residential uses or 200 feet of commercial or office uses would involve substantial noise generating activities, such as building demolition, grading, excavation, pile driving, use of impact equipment, or building framing continuing for more than 12 months. For such large or complex projects, a Construction Noise Logistics Plan that specifies hours of construction, noise and vibration minimization measures, posting or notification of construction schedule, and designation of a noise disturbance coordinator who would respond to neighborhood complaints will be required to be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residential and other uses.
- EC-2.3: Require new development to minimize vibration impacts to adjacent uses during demolition and construction. For sensitive historic structures, including ruins and ancient monuments or building that are documented to be structurally weakened, a continuous vibration limit of 0.08 in/sec PPV (peak particle velocity) will be used to minimize the potential for cosmetic damage to a building. A continuous vibration limit of 0.20 in/sec PPV will be used to minimize the potential for cosmetic damage at buildings of normal conventional construction. Equipment or activities typical of generating continuous vibration include but are not limited to: excavation equipment; static compaction equipment; vibratory pile drivers; pile-extraction equipment; and vibratory compaction equipment. Avoid use of impact pile drivers within 125 feet of any buildings, and within 300 feet of historical buildings, or buildings in poor condition. On a project-specific basis, this distance of 300 feet may be reduced where warranted by a technical study by a qualified professional that verifies that there will be virtually no risk of cosmetic damage to sensitive buildings from the new

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development during demolition and construction. Transient vibration impacts may exceed a vibration limit of 0.08 in/sec PPV only when and where warranted by a technical study by a qualified professional that verifies that there will be virtually no risk of cosmetic damage to sensitive buildings from the new development during demolition and construction.

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5 PROPOSED PROJECT DESCRIPTION

ACDS has submitted an application for a rezoning and Special Use Permit (SUP) to the City of San Jose (City) for its proposed ACDS Campus Master Plan (proposed Project).³ The proposed Project would be located at the existing ACDS Campus at 6835 Trinidad Drive, in the southern portion of San Jose, in Santa Clara County, and include redevelopment of the Campus with new school buildings, the addition of a new, multipurpose building, and reconfiguration of driveways, drop-off and pick-up zones, and parking lots. The existing site aerial and currently building designations are shown in Figure 5-1 and Figure 5-2, respectively. The proposed Project site plan is shown in Figure 5-3.

The proposed Project would be constructed in four phases over the next approximately 15 years, with each phase lasting approximately five years, based on available funding. The phases are:

- Phase 1: A multipurpose building with a stage and a new western parking lot.
- Phase 2: A new middle school building and office, an eastern parking lot and pick-up/drop-off driveway along Trinidad Drive, and a southern pick-up/drop-off driveway along Akio Way
- Phase 3: A new elementary building
- Phase 4: A theater and enrichment program building

5.1 PROJECT CHARACTERISTICS

5.1.1 Project Construction

The proposed Project would involve construction activities that would occur intermittently in phases over the next approximately 15 years. Phase 1 construction activities would entail relocating the existing, portable classrooms located along the school's southern boundary to the north side of the campus. In their place, a new approximately 15,000 square foot, single-story multipurpose building would be constructed. The existing school parking lot along Trinidad Drive would remain unchanged under this phase; however, the existing inbound access driveway along Akio Way would be closed off during the school's drop-off/pick-up times, and access to the drop-off area would be provided via a new driveway along Akio Way, at the southeast corner of the school site. The new driveway would connect to the existing fire lane that runs along the site's southern and eastern boundaries, providing access to both the drop-off area and the parking spaces located along the eastern fire lane.

Although the timing and sequencing of Phases 2 through 4 are tentative at this point, it is envisioned that Phase 2 would involve replacing the corner parking lot at Trinidad and Akio Way with a new, two-story middle school and administration building totaling approximately 23,256 square feet. Following the development of the new middle school classrooms and administration building, the existing middle school portable classrooms would be removed from the site, making room for a new, approximately 78 space parking lot in the southeastern portion of the campus. During development of the parking lot, driveways along Trinidad Drive and Akio Way would be constructed and reconfigured, respectively, so

³ The City requires rezoning the property from R-1-5 to Public, Quasi-Public (PQP) and the issuance of a Special Use Permit for the private school use

there would be two, distinct pick-up and drop-off locations. The newly constructed driveway along Trinidad Drive would include approximately 17 parking spaces.

Phase 3 would involve the deconstruction of the existing multipurpose building, administration building, and restroom building to accommodate a new, approximately 21,640 square foot elementary school classroom building.

Phase 4 would include, in the following order, the:

- Renovation of the previously vacated, former elementary school building,
- Demolition of the existing, science/art/library/computer rooms, and
- Construction of a new approximately 12,600 square foot enrichment building and approximately 5,935 square foot theater/auditorium building.

ACDS anticipates construction activities associated with Phase 1 would begin in the summer of 2021 when school is in recess for summer break. Construction activities associated with Phase 1 are anticipated to last approximately 12 to 15 months. It is assumed construction activities associated with Phases 2 through 4 would also take approximately 12 to 15 months for their respective site improvements. Please refer to Section 6.2.2 for more information on potential construction activities.

5.1.2 Site Design and Layout

The new, multipurpose building would be located along the campus' southern boundary, and the building's eastern façade would be approximately 130 feet from the property line shared with single-family residences along Winterset Way. The middle school and administrative building would be constructed along the campus' south-western boundary and would front both Akio Way and Trinidad Drive. The elementary school building would be located on the northwestern portion of the campus, north of the middle school and administration building, and west of the asphalt play area. The auditorium and enrichment building would be located on the interior of the site, north of the multipurpose building and middle school/administration building, respectively. It is anticipated all buildings included in the proposed Project would feature roof-mounted HVAC units located behind parapet walls. Figure 5-4 depicts the parapet wall for the new multipurpose building.

Upon completing Master Plan Phase 2, approximately 17 parking spaces would be provided along the western portion of the campus, and approximately 78 spaces would be provided along the southeastern portion of the campus. Vehicular access would be provided along Akio Way and Trinidad Drive (see Figure 5-3).

5.1.3 Project Operation

The ACDS is an existing, private school operating in San Jose. It currently serves approximately 360 students ranging from preschool (age 4) to 8th grade; however, it has served up to 425 students in the recent past. Typical, weekday operations at the school begin around 7:00 AM with before school care and end around 6:00 PM, once after-school sports and clubs have finished. Middle school is in session from 8:00 AM to 3:00 PM. ACDS is not proposing to change existing, daytime, school operations as part of the proposed Project; however, the proposed multipurpose room (Phase 1) could be used for other afterschool and weekend activities. In addition, under full buildout of the Master Plan, the ACDS would feature two new driveways; one along Trinidad Drive and one along Akio Way.

Operation of the Proposed Multipurpose Building

After construction of Phase 1 is completed, the ACDS Campus would have a new multipurpose room. The proposed building would feature:

- A gymnasium with regulation size-basketball and volleyball courts,
- An elevated stage and backstage space
- Locker rooms that double as dressing rooms for the stage
- Storage and office space, and
- A servery for concessions and serving school lunches.

The primary function of the multipurpose room would be to shift existing physical education (P.E.) activities and the performing arts program to a safer and more modern, indoor, all-season space.⁴ While the primary function of the multipurpose room would focus on the school's athletics and performing arts programs, ACDS envisions using the facility for other purposes, such as:

- A gathering space for the entire school while school is in session (e.g., school assemblies, celebrations, author visits, graduation, guest speakers, etc.),
- Potentially providing a community space where the public can interact with one another and the school (e.g., community meeting, parent education, etc.),
- A polling station where ACDS students can provide service and participate in the voting process, and
- Existing afterschool activities (e.g., ACDS sports, evening drama performances, etc.).

As with other schools, ACDS would manage the use of the facility by community-groups as a secondary focus. The school is not proposing or seeking loud noise generating events, such as parties, concerts, or other similar events. For any activities taking place in the multipurpose building, including all school-sponsored and community-organized events, hours of use would generally fall between 7:00 AM and 10:00 PM, Monday through Saturday, and 8:00 AM and 8:00 PM on Sunday. As is current practice, ACDS would continue to notify and alert nearby neighbors in advance of all-school events that involve traffic noise, or other considerations (ACDS, 2019).

In addition, following development of Phase 2, there would be an approximately 78 space parking lot immediately east of the multipurpose building, and adjacent to the campus' shared property line with single-family residences on Winterset Way. It is anticipated this would be the primary parking lot used for after school, evening, and weekend events occurring at the multipurpose building.

Proposed Driveways on Trinidad Drive and Akio Way

With the completion of the proposed Master Plan, vehicular access to the school site during the school's peak hours would be split between two parking lots/drop-off areas: the Trinidad Drive/west parking lot/drop-off area and the Akio Way/east parking lot/drop-off area. The Trinidad Drive drop-off area would be

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⁴ The existing school campus does not have a gymnasium; rather, the school relies on a 25-year-old portable when students need to be brought indoors for P.E. (e.g., when it is raining). In addition, the school's performing arts program is currently housed in a corner of the school's former cafeteria.

designated for kindergarten and elementary grades, while the Akio Way drop-off area would be designated for the middle school grades. Based on existing, inbound and outbound trips to the ACDS Campus in the morning in afternoon, it is estimated approximately 151 and 70 vehicles would access the Trinidad Drive drop-off area during the AM and after school peak hours, respectively, and 74 and 35 vehicles could access the Akio Way drop-off area during the AM and after school peak hours, respectively (Hexagon, 2020).

The ACDS actively encourages students and their families to carpool for morning drop-off and afternoon pick-up. Parents are able to use the school's Veracross student information system that has a custom feature enabling them to find other ACDS families living near them who want to form a carpool. Approximately half of the cars dropping or collecting students each day are carpools (ACDS, 2019). In addition, although not part of the proposed Project, the ACDS administration plans to launch an incentive program in 2020 that would celebrate and reward staff for carpooling, biking, or walking to campus.

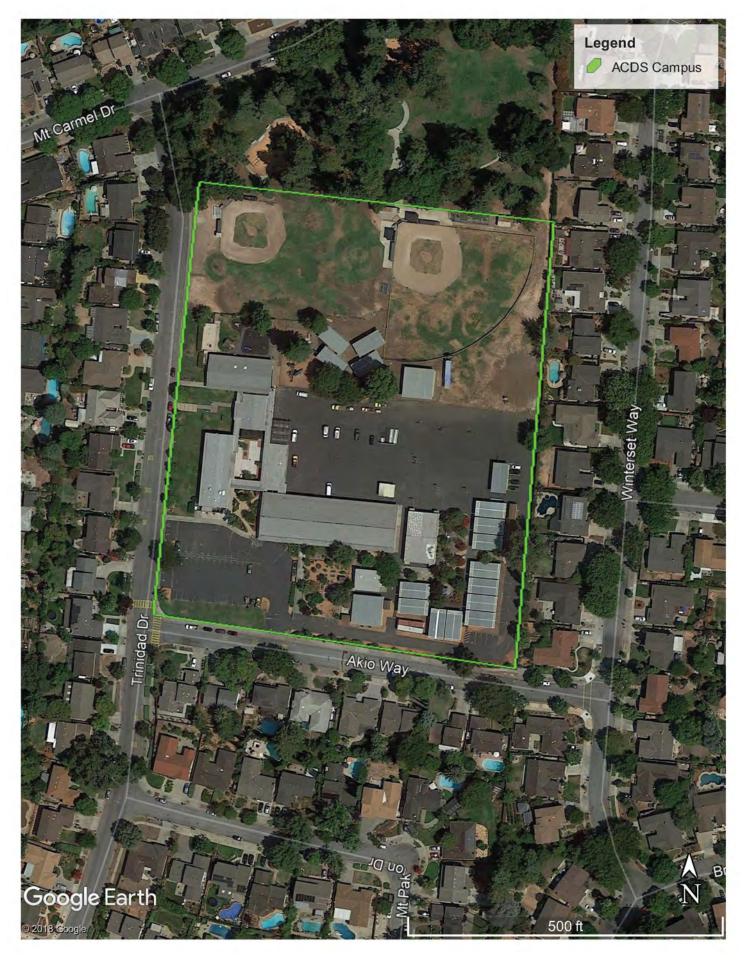
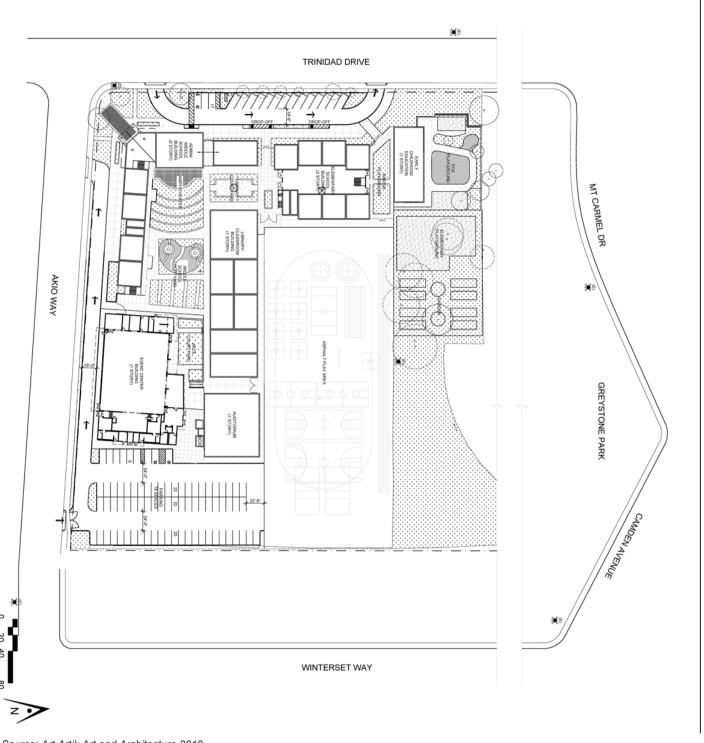


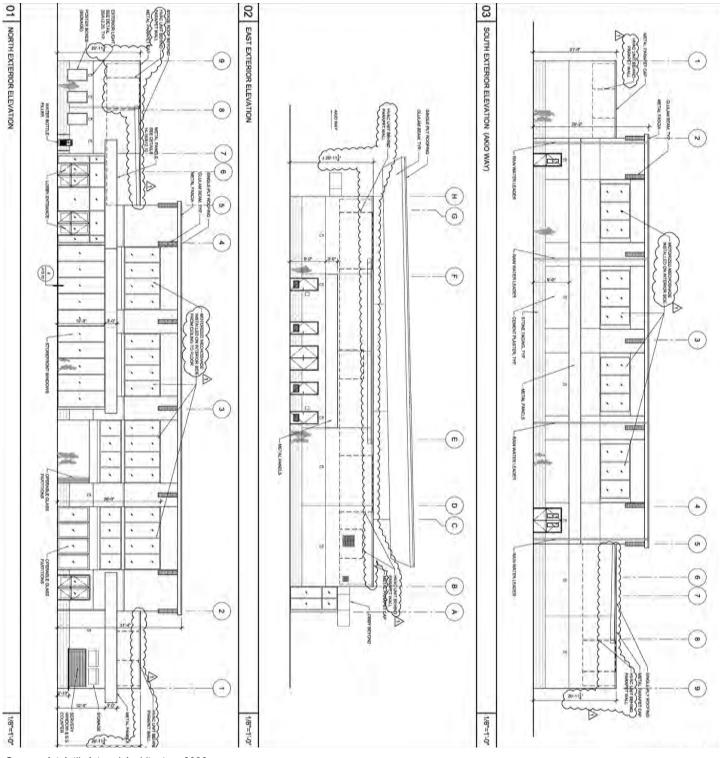
Figure 5-1 Proposed Project Aerial



Figure 5-2 Existing Campus Building Designations



Source: Art Artik Art and Architecture 2019



Source: Art Artik Art and Architecture 2020

6 NOISE IMPACT ANALYSIS

This chapter evaluates the direct and indirect impacts that could result from implementation of the proposed ACDS Campus Master Plan Project.

6.1 THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G of the State CEQA Guidelines, the proposed Project could result in potentially significant impacts related to noise or vibration if it would result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Generation of excessive groundborne vibration or groundborne noise levels; or
- For a project located within the vicinity of a private airstrip or an airport land use plan, or where such as plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

For the purposes of this Report:

- A substantial temporary noise level increase would occur if the project involves substantial
 construction noise generating activities within 500 feet of residential uses continues for a
 period of 12 or more months and does not prepare a Construction Noise Logistics Plan
 (General Plan Policy EC-1.7).
- A substantial permanent noise level increase would occur if project-generated noise would result in: 1) an increase of 5 dBA DNL or more where the noise levels would remain within the "Normally Acceptable" level; or 2) an increase of 3 dBA DNL or more where the noise levels would equal or exceed the "Normally Acceptable" level (General Plan Policy EC-1.2).

In addition to the CEQA thresholds of significance, this Report evaluates the proposed Project's consistency with the 55 dBA Lmax noise limit established by Section 20.40.6500 of the City's Municipal Code.⁵

6.2 EXPOSURE TO NOISE LEVELS ABOVE APPLICABLE STANDARDS

6.2.1 Land Use Compatibility

The proposed Project consists of modernizing an existing school with new facilities. The City's General Plan indicates 55 DNL is the normally acceptable exterior noise exposure level for public and quasi-public land uses (e.g., schools). The results of the ambient noise monitoring show existing noise levels at the ACDS Campus are approximately 55 dBA DNL; however, these noise levels capture existing

⁵ This approach follows guidance provided by San Jose City staff regarding the City's municipal code standard.

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quasi-public land uses (e.g., schools). The results of the ambient noise monitoring show existing noise levels at the ACDS Campus are approximately 55 dBA DNL; however, these noise levels capture existing noise generated with typical school activities. Absent typical school noise levels captured by the noise monitoring effort, the 24-hour measurement would have been lower than 55 dBA DNL. In addition, the ACDS Campus Master Plan does not propose any activities that would substantially affect the ambient noise environment (e.g., the school does not propose to increase enrollment, a bell system or amplified public address system, etc.). The proposed Project, therefore, is considered compatible with the existing and projected ambient noise level at the Project site.

6.2.2 Potential Construction Noise Levels

As described in Chapter 5, the proposed Project would be constructed over the next approximately 15 years in four different phases, each lasting approximately 12 to 15 months each. Construction activities associated with Master Plan implementation would generally include demolition, site preparation, grading, construction, paving, and architectural coating work.

Project construction would require the use of heavy-duty construction equipment that could temporarily increase noise levels at adjacent property lines near work areas. The type of equipment used could include bulldozers, backhoes, a grader, compactors/rollers, small cranes, and material handlers, lifts, and trucks. Since Project-specific construction equipment information is not available at this time, potential construction-related noise impacts can only be evaluated based on the typical construction activities associated with a commercial development. Table 6-1 presents the estimated, worst-case noise levels that could occur from operation of typical construction equipment.

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Table 6-1: Typical Construction Equipment Noise Levels (dBA)									
	Reference Noise	Percent	Predicted Noise Levels (Leq) at Distance(C)						
Equipment	Level at 50 Feet (Lmax)(A)	Usage Factor ^(B)	50 Feet	75 feet	100 feet				
Backhoe	80	40	76	72	70				
Bulldozer	85	40	81	77	75				
Compact Roller	80	20	73	69	67				
Crane	85	16	77	74	71				
Delivery Truck	85	40	81	77	75				
Excavator	85	40	81	77	75				
Generator	82	50	79	75	73				
Pneumatic tools	85	50	82	78	76				
Scraper	85	40	82	77	75				

Sources: Caltrans, 2013b and FHWA, 2010.

As shown in Table 6-1, the worst-case Leq and Lmax noise levels associated with the operation of a dozer, excavator, scraper, etc. are predicted to be approximately 82 and 85 dBA, respectively, at a distance of 50 feet from the equipment operating area. The concurrent operation of two or more pieces of construction equipment would result in noise levels of approximately 86 dBA Leq and 90 dBA Lmax at a distance of 50 feet from equipment operating areas⁶.

During demolition, site preparation, grading, and paving activities construction equipment would operate throughout the site, moving closer to one property line and farther away from another; building construction and architectural coating activities would be concentrated at building pad locations. For these reasons, potential construction noise levels are estimated for worst-case equipment operations for each phase of Master Plan implementation, as described below.

 Phase 1: Construction activities associated with development of the multipurpose facility are evaluated at a distance of 100 feet, which is the approximate distance between the proposed building and residences across the street on Akio Way

⁽A) L_{max} noise levels based on manufacturer's specifications.

⁽B) Usage factor refers to the amount of time the equipment produces noise over the time period.

⁽c) Estimate does not account for any atmospheric or ground attenuation factors. Calculated noise levels based on Caltrans, 2009: L_{eq} (hourly) = L_{max} at 50 feet – 20log (D/50) + 10log (UF), where: L_{max} = reference L_{max} from manufacturer or other source; D = distance of interest; UF = usage fraction or fraction of time period of interest equipment is in use.

⁶ As shown in Table 6-1 a single bulldozer provides a sound level of 81 dBA Leq at a distance of 50 feet; when two identical sound levels are combined, the noise level increases to 84 dBA Leq and when three identical sound levels are combined, the noise level increases to 86 dBA Leq. These estimates assume no shielding or other noise control measures are in place at or near the work areas.

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 Phase 2: Construction activities associated with Phase 2 are evaluated at three different locations:

- Noise levels associated with the deployment of the middle school and administration building is evaluated at a distance of 100 feet, which is the approximate distance between the proposed building and residences across the street on Akio Way.
- Noise levels associated with the development of the eastern parking lot are evaluated at a
 distance of 50 feet, which is the approximate distance between the center of the eastern
 parking lot, and the property line with residences along Winterset Way.
- Noise levels associated with the development of the western parking lot are evaluated at a distance of 75 feet, which is the approximate distance between the center of the western parking lot and the residences along Trinidad Drive.
- Phase 3: Construction activities associated with development of the elementary school building are evaluated at a distance of 100 feet, which is the approximate distance between the proposed building and residences on Trinidad Drive.
- Phase 4: Construction activities associated with the enrichment building and auditorium are
 evaluated at a distance of 100 feet, which is the approximate distance between the auditorium
 and the property line with residences along Akio Way.

Table 6-2, summarizes potential, worst-case equipment noise levels at sensitive receptor locations by phase.

Table 6-2: Worst-Cast Noise Levels at Residential Receptor Locations by Phase									
	Distance	Predicted Noi	Predicted Noise Level (Leq)						
Phase / Activity	(feet)	Single Piece of Equipment	Multiple Pieces of Equipment ^(A)						
Phase 1: Multipurpose Facility	100	75	79						
Phase 2: Middle School / Administration Building	100	75	79						
Phase 2: Eastern Parking Lot	50	81	85						
Phase 2: Western Parking Lot	75	77	81						
Phase 3: Elementary School Building	100	75	79						
Phase 4: Enrichment Building / Auditorium	100	75	79						
(A) Predicted worst-case noise levels are based on the conci	urrent operation of	a bulldozer, delivery truc	k, and backhoe.						

As shown in Table 6-2, worst-case noise levels could range from approximately 75 dBA to 85 dBA at nearby sensitive receptor locations depending on the phase and activity being undertaken. In actuality, construction noise levels would likely be lower, since these estimated noise levels evaluate the concurrent operation of equipment at the same distance from the receptor location. In addition, the site is already developed and level, so extensive site-preparation is not anticipated. Furthermore, heavy-duty construction equipment cycles between higher and lower loads, adding variability to the noise generated by the equipment in any given minute. Finally, the above estimates do not consider any potential shielding that would be provided by other buildings on campus (e.g., the middle school / administration building would provide shielding for residences along Trinidad Drive and Akio Way during development of the enrichment building and auditorium).

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The City of San Jose does not have established maximum construction noise level limitations; however, General Plan Policy EC-1.7 requires construction projects within 500 feet of residential land uses to prepare a Construction Noise Logistics Plan if the project would involve substantial noise generating activities for 12 or more months. In addition, City Municipal Code Section 20.100.450 limits construction activities occurring within 500 feet of residence to the hours of 7 AM to 7 PM, Monday through Friday, unless alternative hours are expressly allowed in a development permit or other planning approval.

As stated previously, each phase of Campus Master Plan construction is anticipated to last approximately 12 to 15 months. As such, MIG recommends the proposed Project implement Mitigation Measure NOI-1, which requires the preparation of a Construction Noise Logistics Plan prior to beginning construction activity for any Campus Master Plan phase. At a minimum, the Construction Noise Logistics Plan should specify the hours of construction, noise and vibration minimization measures, posting or notification of construction schedule, and the designation of a noise disturbance coordinator who would respond to neighborhood complaints.

Mitigation Measure NOI-1: Consistent with City of San Jose General Plan Policy EC-1.7, the ACDS and/or its designated contractor shall prepare a Construction Noise Logistics Plan (CNLP) prior to the start of any construction activities associated with the ACDS Campus Master Plan. The CNLP shall apply to all phases of master plan development and shall:

- Designate an ACDS employee and/or contractor's representative to serve as a noise disturbance coordinator responsible for receiving noise complaints and resolving constructionnoise related issues.
- Include procedures describing how the noise disturbance coordinator will receive, respond to, and resolve construction noise complaints. At a minimum, upon receipt of a noise complaint, the Contractor and/or ACDS representative described in the first sub-bullet above shall identify the noise source generating the complaint, determine the cause of the complaint, and take steps to resolve the complaint.
- Restrict construction work hours to the hours specified in City of San Jose Municipal Code Section 20.11.450 (7:00 AM to 7:00 PM, Monday through Friday)
- Require construction staging areas to be established in locations that create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project sure during all project construction
- Provide notice (at least 10 days prior to the start of construction activities) to all adjacent residences that describes the approximate start date and schedule for the construction activities and a contact name and phone number for the construction contractor and/or ACDS staff person responsible for handling construction-related noise complaints. The notice shall also identify periods of peak construction activities and noise levels (e.g., grading activities, foundation work, etc.).
- Specify the noise and vibration minimization measures that will be undertaken during the construction phase to reduce construction-related noise levels. Such measures may include, but are not limited to:
 - Equipping all internal combustion engine-drive equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment being controlled.
 - o Prohibiting unnecessary idling of internal combustion engines (i.e., idling should generally

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- be limited to no more than five minutes).
- Using hydraulically or electrically powered impact tools (e.g., jack hammer) to avoid noise associated with compressed air exhaust from pneumatically powered tools, if feasible.
- Reducing noise from pneumatic tools through the use of a noise suppression device on the compressed air exhaust.
- Connecting to existing electrical service at the site to avoid the use of stationary, diesel- or other alternatively-fueled power generators.
- Locating stationary noise-generating equipment such as pumps, compressors, and welding machines as far from sensitive receptor locations as practical. If such equipment must be located near receptors, provide shielding in the form of a three-sided sound enclosure (with a full or partial roof) that provides for proper ventilation, equipment operation, and effective noise control.
- Phasing demolition and construction activities to take advantage of noise shielding provided by existing structures (i.e., start from the side of the building the farthest away from nearby sensitive receptors).
- Prohibiting noise from radios or other amplified sound devices to be audible beyond the property line of the construction site.

In addition to Mitigation Measure NOI-1, MIG recommends the implementation of PDF-1 prior to the start of Phase 2 construction activities (see Section 6.2.3). The implementation of PDF-1, while intended to reduce operational noise levels associated with parking lot activities at the southeastern parking lot, would have the added benefit of reducing construction noise levels at residential land uses along Winterset Way during construction of Phases 2 through 4. With the implementation of Mitigation Measure NOI-1 and PDF-1, the proposed Project would not generate a substantial temporary noise increase in the vicinity of the project.

6.2.3 Potential Operational Noise Levels

The ACDS is an existing school that generates noise levels from typical school activities, including vehicle trips, operation of HVAC units, landscaping and maintenance activities, waste-disposal truck traffic, etc. Implementation of the proposed project would not change the types of noise generated at the project site but could change the locations where these noise sources occur. Under implementation of the proposed project, the existing ambient noise environment could change as a result of:

- Existing portable classrooms being removed, as well as their HVAC units, and new HVAC
 equipment being installed top of the new buildings proposed in the Campus Master Plan;
- On-site traffic being shifted to two driveways: one along Trinidad Drive, and one along Akio Way;
 and
- Primary on-site parking being shifted to the southeastern parking lot under the implementation of Phase 2. Potential noise levels associated with the use of this parking lot could be more prominent during after hour / weekend use of the multipurpose building.

HVAC Equipment Operation

Although not depicted on all buildings shown the ACDS Campus Master Plan site plan (see Figure 5-2), it is anticipated each one of the buildings proposed under the Master Plan would feature HVAC unit(s)

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on top of the rooves. The specific locations of HVAC units and parapet walls for each project phase are contingent on final building design. For example, the multipurpose facility, which is the only building for which detailed drawings are available at this point, would feature parapet walls that shield the multipurpose HVAC units from residential receptors (see Figure 5-4). Roof-top mounted HVAC units are presumed to be a Carrier Model 48HC or equivalent rated at 3 tons and capable of producing a noise level of approximately 76 dBA at a distance of 3 feet. Rooftop HVAC units would generally be located in the center of the proposed buildings.

HVAC equipment was presumed to operate for 15 minutes every hour of the day to account for refrigeration and building heating and cooling needs. This assumption is considered conservative (likely to overestimate noise) since this level of operation would likely not occur during the nighttime (i.e., maximum use involves afternoon cooling operations in the summer, and morning and early-afternoon heating operations during the winter). Units would be concealed behind a parapet wall that shield the HVAC units from the street and serve to reduce potential HVAC unit noise levels at adjacent property lines. The level of attenuation provided by this partial shielding was assumed to be 5 dBA.⁷

Noise levels associated with operation of two HVAC units were assessed at a distance of 165 feet. This is the approximate distance between the center of the auditorium and event center, and the residential property line along the project site's eastern boundary. At this distance, the two HVAC units would produce an hourly noise level of approximately 49.2 dBA Leq, which is lower than the existing, hourly ambient noise level monitored along the project site's southeastern boundary. For example, during the 8:00 AM hour on December 10, 2019, it was observed the hourly average noise level was approximately 55.1 dBA Leq, and a primary noise source at this location was from middle school portable classroom HVAC operation. Under implementation of the Campus Master Plan these existing, middle school classrooms would be removed, and HVAC units would generally be located further away from residential receptors.

Vehicular Operation on Trinidad Drive and Akio Way Driveway

Under buildout of the Campus Master Plan, two, new driveways would be constructed along the campus' western and southern borders. The Trinidad Drive drop-off area would be designated for kindergarten and elementary grades, while the Akio Way drop-off area would be designated for the middle school grades. Based on existing, inbound and outbound trips to the ACDS Campus in the morning in afternoon, it is estimated approximately 151 and 70 vehicles would access the Trinidad Drive drop-off area during the AM and after school peak hours, respectively, and 74 and 35 vehicles could access the Akio Way drop-off area during the AM and after school peak hours, respectively (Hexagon 2020). This is in contrast to existing conditions on Trinidad Drive where there are approximately 171 and 91 inbound and outbound trips during the AM and after school peak hours, respectively. Similarly, for existing inbound and outbound trips on Akio Way, there were approximately 91 and 29 trips occurring during the AM and after school peak hours, respectively.

Common building materials such as wood framing materials, plywood, and light concrete/stucco all have transmission loss rating greater than 20 dBA to 25 dBA and are capable of reducing transmitted sound levels by 10 to 15 dBA at minimum (Caltrans, 2013a). This analysis assumes a 5-dBA reduction in HVAC unit noise levels associated with parapet walls. This is considered a conservative assumption (i.e., likely to underestimate shielding and noise attenuation).

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The proposed driveway reconfiguration would not result in a substantial noise level increase at nearby residential receptors. The ambient noise environment at and near the ACDS Campus during the morning and afternoon is predominantly influenced by traffic on Trinidad Drive and Akio Way. Although some of this traffic is attributable to students, parents, and staff at ACDS, the majority of it is attributable to other traffic, such as that from other schools in the area (e.g., Bret Harte Middle School, Leland High School, etc.) and adults traveling to work. Based on the traffic analysis, it is estimated the proposed reconfiguration would reduce morning, driveway trips along Trinidad by 20, and increase driveway trips along Akio by approximately 17. As shown in the equations in Section 2.1.3, it would take a doubling of energy (or associated activity) to increase noise levels by 3 dBA. The Project does not propose such a change in drop-off or pick-up distribution and any, slight change to the noise environment would likely be imperceptible to the human ear given the other sources of noise in the area. Furthermore, as shown in Table 3-1, the short-term measurement taken approximately 20 feet north of existing drop-off activities showed typical AM peak hour noise levels were approximately 56.0 to 57.4 dBA. The proposed reconfiguration would move pick-up and drop-off activities further into the campus. At a distance of approximately 80 feet (the distance from the drop-off lane on Trinidad Drive to the nearest residential property line), these noise level would be reduced to approximately 50.0 to 51.4 dBA.

Although this assessment is based on the anticipated ingress and egress associated with existing (i.e., 362 students) pick-up and drop-off activities, these findings would still hold true if this school were operating under historical enrollment (i.e., 425 students). Even if the school were to have an additional 63 students to be aligned with historic maximum, this level of additional vehicular operation would not be double what it currently is. Furthermore, the ACDS actively promotes carpooling which would likely reduce the number of vehicle trips associated with potential, additional enrollment, not to exceed historic maximum levels.

Vehicular Operation in the Southeastern Parking Lot and Activities at the Multipurpose Building

Buildout of the proposed Campus Master Plan would result in the development of a new multipurpose building, approximately 78 space parking lot in the southeastern portion of the campus. Although the multipurpose building is intended to be used primarily for school-related functions, there is the potential for it to be used for other community events during the weekday afternoons and evenings, and during the weekends. Since ACDS is not proposing or seeking loud noise generating events, such as parties, concerts, or other similar events, it is anticipated the primary source of noise occurring from its operation would be from vehicular operation in the parking lot.

Potential noise levels resulting from vehicular operation in the parking lot (e.g., doors shutting, vehicle engines starting up, etc.) were assessed using the guidance and recommendations contained in the Federal Transit Administration's *Transit Noise and Vibration Impact Assessment Handbook* (FTA, 2006). According to this handbook, parking lots with a peak hourly activity of 256 vehicles, more than triple the capacity of the proposed parking lot (i.e., average turn over time would be less than 20 minutes), can produce a noise level of 50.5 dBA Leq at a distance of 50 feet. The center of the proposed parking lot is approximately 50 feet from the residential property line with the single-family homes on Winterset Way.

Although under this hypothetical scenario the average, hourly noise level could be 50.5 dBA Leq, instantaneous noise levels could be higher. During the monitoring at location ST-1, car doors slamming were observed to create short-term (e.g., one second) noise level increases of up to 63 dBA Lmax at a distance of 20 feet. At a distance of approximately 5 feet (i.e., the approximate distance a car door would be from the residential property line) this noise level would be closer to 69 dBA Lmax. Since the proposed parking lot would be adjacent to a residential property line, and instantaneous noise levels could be as high

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as 69 dBA Lmax, noise levels resulting from vehicular activity would have the potential to exceed the project-specific goal of not having exceeding 55 dBA Lmax nearby residential property lines, consistent with Section 20.40.6500 of the City's Municipal Code.

CEQA Conclusion

The proposed project would not increase the ambient noise level as adjacent sensitive receptor locations by 3.0 dBA DNL or more for the following reasons.8 First, the proposed Project would include deconstruction / removal of some of the existing classrooms and buildings at the project site, which could serve to reduce noise levels from HVAC operation. New facilities, such as the multipurpose building and the auditorium would be erected at locations more centrally located than existing structures. These new buildings would likely have HVAC units that generate noise that could be perceptible at nearby sensitive receptor locations; however, the noise levels would generally be lower than what they are currently and other sources of on-site noise (e.g., HVAC on middle school portables near the property boundary with single-family residences on Winterset Way) would be removed from the site. As such, the proposed Project is anticipated to reduce HVAC noise levels at nearby sensitive receptor locations. Second, the proposed Project would involve the construction of two driveways that would change access to the ACDS Campus along Trinidad Drive and Akio Way. Although there would be changes to the ingress and egress locations and drop-off and pick-up distribution, the overall change in trips along these two streets would be nominal, and the noise likely imperceptible to the human ear given the other sources of noise in the campus' vicinity (e.g., vehicular transportation from other schools and residents in the area). Third, even if every space in the project site's southeastern parking lot were to turn over three times in the span of an hour, the resulting hourly average noise level would be less than it is currently. In addition, this parking lot would not be used on a continuous basis throughout the day; rather, it would experience peak activity during the morning drop-off, afternoon pick-up, and during special events. Finally, although not described in the preceding analysis, the proposed Project could serve to reduce noise levels emanating from the school site. For example, among other things, the multipurpose room is intended to be used by ACDS for P.E. and athletic purposes, meaning that some of the daytime noise levels generated by students exercising outside could be reduced by bringing them inside. For example, noise levels observed at location LT-2 on December 10th from approximately 3:30 PM to 4:45 PM showed the average 10-minute average noise level ranged from 56.1 dBA Leq to 67.6 dBA Leq, which corresponds with an ACDS basketball practice that occurs on the eastern portion of the black top. The 10-minute average noise levels generally decrease to the mid-40 dBA range after that. As such, overall perceived noise levels from the ACDS could be lower under operational activities proposed by the Master Plan, and implementation of the Master Plan would not increase noise levels by 3 dBA DNL or more ay any nearby sensitive receptor locations.

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The proposed project would result in noise levels would equal or exceed the "Normally Acceptable" standard for nearby residential land uses (i.e., 55 DBA DNL). Consistent with General Plan Policy EC-1.2, the incremental increase would be potentially significant if the project results in an increase of 3.0 dBA DNL or more under these conditions. Accordingly, this analysis utilizes a 3.0 dBA DNL increase as the CEQA threshold of significance, since the ambient noise levels at nearby sensitive residential receptor property lines would be in excess of 55 dBA DNL.

Page 6-10 Noise Impact Analysis

Non-CEQA Standard Conclusion

Although operation of the proposed project would not result in a 3 dBA DNL increase at any nearby receptor locations, activities associated with motor-vehicle operation in the campus' southeastern boundary have the potential to conflict with the 55 dBA Lmax noise level limitation established in Section 20.40.6500 of the City's Municipal Code. Accordingly, Project Design Feature-1 (PDF-1) has been incorporated to reduce potential noise levels from vehicular activity in the southeastern parking lot. PDF-1 consists of the installation of a permanent, 6-foot tall, concrete barrier along the campus' property line with residential land uses on Winterset Way. The concrete wall would be installed at the beginning of Phase 2 to initially help shield sensitive receptor locations from construction noise, but also operational noise associated with parking lot operation.

Project Design Feature-1: Prior to any construction activities associated with Phase 2 of the Campus Master Plan, the ACDS shall install a permanent, concrete barrier along the entire portion of the proposed Project's southeastern parking lot. The barrier shall be constructed free of openings or gaps and have a minimum rated transmission loss value of 25 dBA (or higher). The design of this barrier would reduce noise levels between the southeastern parking lot and the residential property line by 15 dBA (or more).

With the implementation of PDF-1, the proposed Project would not exceed the City's 55 dBA Lmax noise limitation at a receptor property line.

6.3 EXPOSURE TO EXCESSIVE GROUNDBORNE VIBRATION / NOISE LEVELS

The potential for groundborne vibration is typically greatest when vibratory or large equipment such as rollers, impact drivers, or bulldozers are in operation. For the proposed Project, the largest earthmoving equipment would primarily operate during demolition, site preparation, grading, and paving work across the four phases of Campus Master Plan implementation. This equipment would, at worst-case and very limited period of times, operate adjacent to the site's property lines and within approximately 25 feet of the residences immediately east of the ACDS Campus; however, most site work would occur at least 50 feet or more from Project property lines. Table 6-3 lists the typical vibration levels generated by the type of heavy-duty construction equipment most likely to be used during Project construction, as well as the estimated vibration levels at nearby residential receptor locations.

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⁹ As stated under Section 6.1, the 55 dBA Lmax is a standard against which the proposed project is being prepared (Municipal Code Section 20.40.6500). It is not, however, a CEQA threshold of significance.

Noise Impact Analysis Page 6-11

Table 6-3: Potential Groundborne Vibration Levels										
Equipment	Peak Particle Velocity ^(A) (Inches/Second) at Distance									
Equipment	100 Feet	400 Feet								
Vibratory Roller	0.21	0.085	0.035	0.006						
Large Bulldozer	0.089	0.036	0.015	0.002						
Small Bulldozer	0.03	0.012	0.005	0.001						
Loaded Truck	0.076	0.031	0.013	0.002						
Jackhammer	0.035	0.014	0.006	0.001						

Sources: Caltrans, 2013b and FTA, 2006.

As shown in Table 6-3, construction equipment vibration levels from a roller could exceed the City of San Jose's vibration detection threshold of 0.20 in/sec PPV, which is used to minimize the potential for cosmetic damage at buildings of normal conventional construction (General Plan Policy EC-2.3). This, however, is not considered to be excessive, because any vibratory roller operating near property lines would be short in duration and intermittent (lasting only a few hours or days in work areas closest to property lines) and would not be close enough to nearby structures to cause damage. In addition, none of the other pieces of heavy-duty off-road construction equipment anticipated for use (e.g., bulldozers, forklifts, etc.) would generate a vibration noise levels exceeding 0.20 in/sec PPV. Thus, short-term, intermittent construction equipment vibration levels would not be excessive.

Once operational, the proposed Project would not result in the operation of sources that would generate substantial groundborne levels.

6.4 AIRPORT-RELATED NOISE

The proposed Project site is located approximately 10 miles south of the San Jose International Airport. The proposed Project is not within an airport influence area, and would not expose students or staff to excessive public or private airport-related noise.

⁽A) Estimated PPV calculated as: PPV(D)=PPV(ref*(25/D^1.3 where PPV(D)= Estimated PPV at distance; PPVref= Reference PPV at 25 ft; D= Distance from equipment to receiver; and n= ground attenuation rate (1.3 for competent sands, sandy clays, silty clays, and silts).

Page 6-12 Noise Impact Analysis

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7 Report Preparers and References

This report was prepared by MIG under contract to Almaden Country Day School. This report reflects the independent, objective, professional opinion of MIG. The following individuals were involved in the preparation and review of this report:

MIG

Chris Dugan, Director of Air Quality, 2055 Junction Ave, Ste. 205

Greenhouse Gas, and Noise Services San Jose, CA 95131

(650) 327-0429

Phil Gleason, Senior Analyst I 2055 Junction Ave, Ste. 205

San Jose, CA 95131 (650) 327-0429

Almaden Country Day School

Olaf Jorgenson, Ed. D., Head of School 6835 Trinidad Drive

San Jose, CA 95120 (408) 997-0424

7.1 REFERENCES

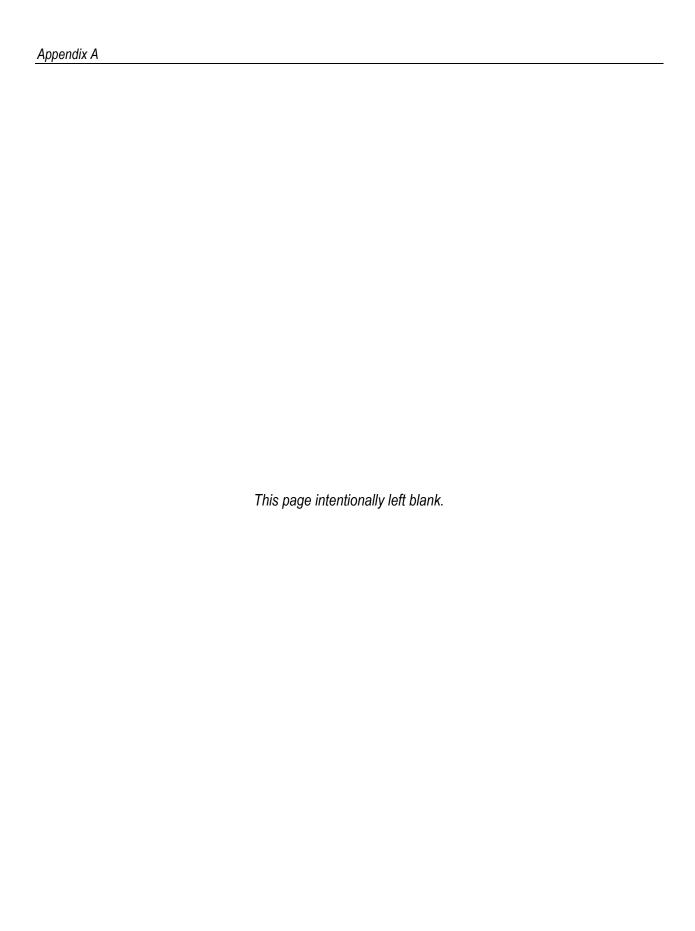
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APPENDIX A: Technical Noise Data



Almaden Country Day School Campus Master Plan San Jose, CA Appendix A: Ambient Noise Monitoring Data Prepared by MIG, December 2019

Site LT-1 (AC	Site LT-1 (ACDS Eastern Campus, Approximately 75 feet north of Akio Way)										
<u>Date</u>	<u>Time</u>	<u>Duration</u>	Leq	<u>Lmin</u>	<u>Lmax</u>	<u>L(1)</u>	<u>L(5)</u>	<u>L(10)</u>	<u>L(25)</u>	<u>L(50)</u>	<u>L(75)</u>
12/10/2019	7:00 AM	20-minutes	56.0	44.9	67.5	60.4	58.0	57.4	56.5	55.8	54.5
12/10/2019	8:00 AM	1-hour	54.5	42.7	66.1	59.6	57.3	56.3	55.1	53.7	52.9
12/10/2019	9:00 AM	1-hour	55.0	41.7	67.5	61.6	59.0	57.9	56.0	53.6	51.5
12/10/2019	10:00 AM	1-hour	53.5	36.8	71.7	59.3	56.9	55.8	54.3	52.8	50.6
12/10/2019	11:00 AM	1-hour	56.5	37.5	72.6	66.2	60.4	58.9	56.5	54.3	52.3
12/10/2019	12:00 PM	1-hour	60.0	33.8	88.0	70.4	61.7	60.2	58.5	56.6	54.8
12/10/2019	1:00 PM	1-hour	53.7	34.0	77.1	65.4	61.7	55.9	48.5	44.7	39.7
12/10/2019	2:00 PM	1-hour	50.0	37.7	68.1	60.3	54.0	52.2	50.2	46.7	44.3
12/10/2019	3:00 PM	1-hour	56.0	46.8	68.6	63.2	60.2	58.8	56.6	54.8	53.0
12/10/2019	4:00 PM	1-hour	62.3	34.9	78.0	70.6	68.2	65.5	62.9	59.7	57.1
12/10/2019	5:00 PM	1-hour	43.0	35.9	62.6	50.3	46.6	44.9	43.0	41.5	40.2
12/10/2019	6:00 PM	1-hour	44.2	35.4	57.2	50.7	47.6	46.4	44.5	43.3	42.2
12/10/2019	7:00 PM	1-hour	43.5	33.0	59.5	50.3	47.3	46.2	44.2	42.2	40.6
12/10/2019	8:00 PM	1-hour	48.1	33.9	67.1	57.4	54.5	52.1	47.6	44.3	42.2
12/10/2019	9:00 PM	1-hour	47.4	41.2	54.7	51.1	50.2	49.4	48.5	47.0	45.5
12/10/2019	10:00 PM	1-hour	45.9	34.6	57.0	51.8	50.0	49.2	46.6	44.6	42.3
12/10/2019	11:00 PM	1-hour	40.5	26.6	54.9	47.4	44.4	43.4	42.5	37.2	34.6
12/11/2019	12:00 AM	1-hour	38.0	24.8	49.5	44.7	42.1	41.8	41.4	31.1	28.1
12/11/2019	1:00 AM	1-hour	39.7	25.2	49.4	46.4	45.9	45.7	41.9	31.2	28.0
12/11/2019	2:00 AM	1-hour	39.3	26.4	49.8	45.3	44.5	44.1	41.4	33.8	31.3
12/11/2019	3:00 AM	1-hour	37.8	25.3	49.3	44.6	44.1	41.6	41.1	32.0	30.0
12/11/2019	4:00 AM	1-hour	42.6	26.3	53.8	45.9	45.0	44.8	44.4	41.1	40.3
12/11/2019	5:00 AM	1-hour	53.6	31.8	57.7	55.2	54.7	54.5	54.1	53.5	52.9
12/11/2019	6:00 AM	1-hour	50.2	33.0	62.2	55.5	54.0	52.5	50.5	49.1	48.6
12/11/2019	7:00 AM	1-hour	51.8	38.9	72.7	60.4	56.2	54.3	51.7	49.7	48.2
12/11/2019	8:00 AM	1-hour	52.5	42.8	71.8	60.9	56.8	55.4	52.7	50.4	49.0
12/11/2019	9:00 AM	1-hour	53.7	39.9	66.6	60.2	57.5	56.0	54.4	52.5	51.0
12/11/2019	10:00 AM	1-hour	52.7	41.0	69.5	59.4	56.5	55.3	53.6	51.9	49.4
12/11/2019	11:00 AM	1-hour	55.8	40.3	68.8	62.1	59.5	58.3	56.5	54.7	53.0
12/11/2019	12:00 PM	1-hour	57.4	40.9	74.2	63.5	60.8	59.8	57.9	56.3	54.9
12/11/2019	1:00 PM	1-hour	51.5	37.8	77.3	61.9	55.4	53.2	49.7	47.0	44.6
12/11/2019	2:00 PM	1-hour	47.5	38.3	67.2	56.4	51.5	49.7	47.2	44.8	43.3
12/11/2019	3:00 PM	1-hour	54.7	44.8	73.2	64.2	59.6	56.7	54.4	52.6	50.8
12/10	Daytime (7 A	M to 10 PM)	56.3	33.8	88.0	65.0	60.8	58.6	56.4	54.1	0.0
12/11	Daytime (7	AM to 4 PM)	53.8	37.8	77.3	61.5	57.8	56.2	54.1	52.3	0.0
	Evening (7 P	M to 10 PM)	46.8	33.0	67.1	54.2	54.2	54.2	54.2	54.2	54.2
	Nightime (10	PM to 7 AM)	46.8	24.8	62.2	50.8	49.6	48.8	47.6	46.0	45.2
		24-hour DNL	55.9								

Site LT-2 (AC	Site LT-2 (ACDS Eastern Campus, Near Blacktop)										
<u>Date</u>	Time	<u>Duration</u>	Leq	<u>Lmin</u>	Lmax	<u>L(1)</u>	<u>L(5)</u>	<u>L(10)</u>	<u>L(25)</u>	<u>L(50)</u>	<u>L(75)</u>
12/10/2019	7:00 AM	30-minutes	58.4	51.0	67.7	63.1	61.0	60.2	59.1	57.9	56.6
12/10/2019	8:00 AM	1-hour	55.1	40.1	64.9	59.5	56.8	56.0	55.4	54.8	54.0
12/10/2019	9:00 AM	1-hour	52.1	36.9	65.5	58.4	55.8	55.0	52.4	51.0	50.2
12/10/2019	10:00 AM	1-hour	45.9	33.6	65.5	56.4	50.5	47.1	44.4	42.8	41.6
12/10/2019	11:00 AM	1-hour	51.7	34.5	71.9	64.2	55.1	52.2	50.1	48.9	43.1
12/10/2019	12:00 PM	1-hour	52.4	32.8	80.6	63.9	54.2	51.8	47.7	45.3	42.6
12/10/2019	1:00 PM	1-hour	49.3	32.9	74.1	62.4	52.2	48.6	44.8	42.5	38.0
12/10/2019	2:00 PM	1-hour	53.0	34.3	72.4	62.9	59.0	57.6	53.3	46.6	40.1
12/10/2019	3:00 PM	1-hour	54.6	39.8	67.0	61.0	58.7	57.5	55.3	53.2	51.7
12/10/2019	4:00 PM	1-hour	51.6	34.5	66.3	60.0	57.3	55.8	52.0	48.5	45.8
12/10/2019	5:00 PM	1-hour	46.3	35.2	64.5	57.2	52.9	49.6	44.3	40.6	39.0
12/10/2019	6:00 PM	1-hour	50.3	34.8	59.8	56.8	54.4	52.7	49.7	49.2	48.7
12/10/2019	7:00 PM	1-hour	49.8	32.4	68.6	56.0	52.5	51.8	51.2	49.2	39.9
12/10/2019	8:00 PM	1-hour	44.7	33.0	58.6	54.4	49.9	46.9	44.8	42.0	40.5
12/10/2019	9:00 PM	1-hour	51.9	43.1	62.4	57.9	54.4	53.9	53.2	52.1	48.1
12/10/2019	10:00 PM	1-hour	49.1	41.8	60.5	55.3	52.2	51.4	49.6	48.2	46.9
12/10/2019	11:00 PM	1-hour	43.5	26.6	68.0	53.9	44.9	44.2	43.6	37.6	35.9
12/11/2019	12:00 AM	1-hour	39.1	25.0	55.3	47.8	43.0	42.8	42.4	28.4	27.3
12/11/2019	1:00 AM	1-hour	40.8	25.5	51.2	47.7	47.3	47.1	42.5	29.3	28.0
12/11/2019	2:00 AM	1-hour	40.4	27.1	51.7	46.9	46.0	45.6	42.5	30.3	29.4
12/11/2019	3:00 AM	1-hour	39.1	25.9	54.8	46.8	45.7	42.7	42.3	28.7	28.1
12/11/2019	4:00 AM	1-hour	53.6	26.8	59.6	55.7	55.3	55.1	54.7	53.0	52.6
12/11/2019	5:00 AM	1-hour	48.1	31.7	57.6	52.5	50.2	49.4	49.1	47.4	46.7
12/11/2019	6:00 AM	1-hour	46.8	32.6	64.2	54.9	52.2	50.4	47.8	42.9	41.5
12/11/2019	7:00 AM	1-hour	55.2	38.5	72.1	61.8	59.2	57.7	55.5	54.0	52.8
12/11/2019	8:00 AM	1-hour	53.2	43.8	64.0	58.9	55.7	54.6	53.2	52.5	52.1
12/11/2019	9:00 AM	1-hour	50.2	40.2	64.3	58.2	54.6	52.7	50.3	48.7	47.1
12/11/2019	10:00 AM	1-hour	47.0	38.0	59.8	55.1	50.9	49.2	47.2	45.5	43.9
12/11/2019	11:00 AM	1-hour	47.4	38.8	63.6	56.6	51.6	49.1	46.8	45.5	44.2
12/11/2019	12:00 PM	1-hour	51.1	39.9	64.4	58.2	54.4	53.1	52.2	51.4	45.5
12/11/2019	1:00 PM	1-hour	46.8	37.3	66.6	57.2	51.6	48.7	45.3	43.5	42.1
12/11/2019	2:00 PM	1-hour	48.0	37.5	65.0	58.0	53.6	50.7	47.0	44.0	42.5
12/11/2019	3:00 PM	1-hour	52.6	40.7	73.7	65.1	59.0	54.1	49.0	46.6	45.3
12/10	Daytime (7 A	M to 10 PM)	53.0	32.8	80.6	61.3	56.6	55.2	53.0	51.3	49.8
12/11	Daytime (7	AM to 4 PM)	51.1	37.3	73.7	59.9	55.5	53.2	50.9	49.5	47.9
	Evening (7 P	M to 10 PM)	49.7	32.4	68.6	56.3	56.3	56.3	56.3	56.3	56.3
	Nightime (10	PM to 7 AM)	47.3	25.0	68.0	52.6	50.2	49.5	48.4	45.9	45.2
	2	24-hour DNL	54.7								

Site ST-1 (Approximately 20 feet north of the northern Trinidad Drive driveway)											
<u>Date Time Duration Leq Lmin Lmax L(1) L(5) L(10) L(25) L(50) L(75)</u>							<u>L(75)</u>				
12/10/2019	7:50 AM	10-minutes	57.4	47.2	72.9	66.4	61.7	59.8	57.3	54.7	52.1
12/10/2019	8:00 AM	10-minutes	56.0	49.0	63.9	61.1	59.1	58.1	56.8	55.4	54.0

APPENDIX B

Traffic Circulation Review for the Proposed Almaden Country Day School Facility Master Plan Hexagon Transportation Consultants





Memorandum



Date: April 20, 2020

To: Barbara Beard, MIG Inc.

From: Gicela Del Rio, T.E.

Subject: Traffic Circulation Review for the Proposed Almaden Country Day School Facility Master

Introduction

This memorandum presents the results of the traffic circulation and operations analysis conducted for the proposed Almaden Country Day School (ACDS) Facility Master Plan. ACDS is located at 6835 Trinidad Drive, in the Almaden Valley area of San Jose, California. The school campus sits on the former Henderson Elementary School site, a 9.13-acre site owned by the San Jose Unified School District.

The proposed ACDS Master Plan (hereafter also referred to as the project) is proposing improvements to the existing school campus, including the demolition and replacement of existing buildings, relocation of on-site buildings and parking, and construction of new school facilities and parking. The purpose of the proposed improvements is to modernize and enhance existing school elements, such as the campus, academics, and programs, as well as improve other aspects of the existing campus, such as the existing vehicular access and circulation. Student enrollment at the school is not proposed to be increased above historical levels with implementation of the Master Plan.

The proposed project is not anticipated to result in the addition of new school traffic to the school campus. Additionally, the proposed new buildings are not anticipated to generate new traffic during the peak hours of the adjacent street traffic. Therefore, the ACDS Master Plan would not have an effect on traffic conditions on the adjacent roadway network. The proposed improvements, however, would result in changes to the school's parking lot and pick-up/drop-off area, resulting in changes to vehicular access and circulation in the immediate vicinity of the school campus, as well as on-site circulation for both vehicles and pedestrians.

The general school campus location is shown on Figure 1.

Scope of Study

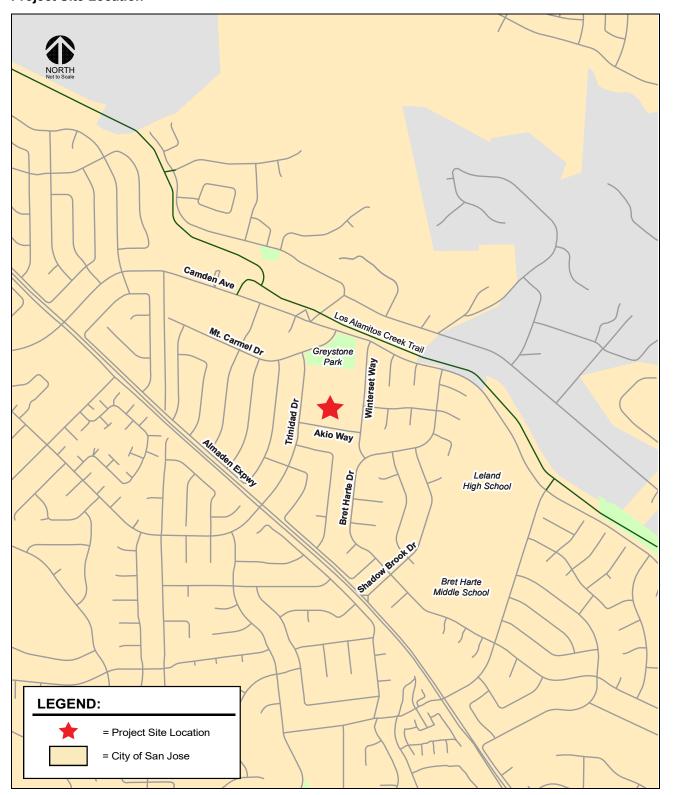
This study was conducted for the purpose of identifying any potential traffic operations issues associated with the ACDS Master Plan, in particular issues related to the operations of the proposed new parking and drop-off areas. The study evaluates the adequacy of site access, on-site circulation, drop-off/pick-up procedures, and any other potential deficiencies along the roadways providing access to the school site. This includes a quantitative analysis of the anticipated traffic volumes at the site's driveways, as well as a qualitative analysis of the drop-off activity procedures and parking layout. The evaluation is based on observations of existing conditions and trip generation counts at ACDS, the proposed new campus layout, access driveway locations, drop-off area and parking lot layout, adjacent roadways and pedestrian facilities, and in accordance with generally accepted traffic engineering standards.

Traffic conditions were evaluated during the school's peak hours, which were observed to be an hour between 7:00 AM and 9:00 AM (and coincides with the morning commute period) and between 2:00 PM and 4:00 PM (prior to the evening commute period, which typically occurs between 4:00 and 6:00 PM). It is during these peak periods that the school experiences the highest traffic volumes on an average day and the impact on the roadway system by school traffic would be greatest.





Figure 1
Project Site Location





Existing Conditions

Almaden Country Day School is an existing kindergarten through 8th-grade school with student enrollment levels varying from a high of 425 students to a low of 335 students over the past 12 years (2008-2020). Staffing has steadily increased over time starting at 59 in 2008 and increasing to 77 in 2020. The school campus is located at the northeast corner of the Trinidad Drive and Akio Way intersection, and is bounded by Trinidad Drive to the west, Akio Way to the south, private residences/Winterset Way to the east, and Greystone Park/Mt. Carmel Drive and Camden Avenue to the north. Regional access to the school is provided via Camden Avenue (via Mt. Carmel Drive and Winterset Way) and Almaden Expressway (via Trinidad Drive and Shadow Brook Drive). Direct access to the school campus is provided via Trinidad Drive and Akio Way. The ACDS campus location and surrounding area are shown on Figure 1.

Parking for the school is currently provided by a 42-space parking lot (both visitor and staff parking) and by an additional 24 staff parking spaces located along the school's south and east site boundaries (along the school's fire lane), for a total of 66 parking spaces on site. Access to the parking lot is provided via two driveways along Trinidad Drive (a two-way and an outbound only access driveway) and one driveway along Akio Way (inbound only access). The fire lane connects to the school parking lot at the Akio Way driveway. The existing school campus is shown on Figure 2.

Existing Transportation Network

Both Trinidad Drive and Akio Way are undivided two-lane residential roadways with on-street parking along both sides of the street, with the exception of the segments along the project site frontage on Akio Way (north side of the street) where parking is prohibited during the hours of 8:00 AM and 4:00 PM and along the ACDS parking lot on Trinidad Drive (east side of the street) where the curb is marked red. Both streets have posted speed limits of 25 miles per hour (mph). Although no stop signs are found at the intersections of Akio Way with Trinidad Drive and Winterset Way, both of these T-intersections operate as one-way stop-controlled intersections, with vehicles on Akio Way yielding to vehicles on Trinidad Drive and Winterset Way.

Various school area signs and pavement markings are currently located along roadways providing access to ACDS. These include the following:

- High visibility crosswalks (yellow crosswalk with longitudinal lines) at the intersection of Trinidad Drive/Akio Way (north and east legs)
- Yellow crosswalks at the intersections of Trinidad Drive/Mt. Carmel Drive (south and east legs of the intersection) and Winterset Way/Akio Way (north and west legs)
- SLOW SCHOOL XING pavement markings on the approaches to the high visibility and yellow crosswalks
- California Manual on Uniform Traffic Control Devices (CA MUTCD) school zone sign assemblies S1-1 and W16-9P (school crossing ahead sign), S1-1 and S4-3P (school zone sign), and S1-1 and W16-7P (school crossing sign) along Trinidad Drive, Akio Way, Winterset Way, and Mt. Carmel Drive.

The existing school signage and pavement markings in the project area satisfy the CA MUTCD recommended signage and crosswalk/pavement markings for school zones. The locations of the existing school signs and pavement markings are shown on Figure 3.

Pedestrian facilities in the vicinity of the school site include continuous sidewalks along both Trinidad Drive and Akio Way, the aforementioned marked crosswalks, and curb ramps. At the time field observations were conducted for this project (March 2019), although the surrounding intersections include curb (wheelchair) ramps, American with Disabilities Act (ADA) compatible curb ramps were observed at the intersection of Winterset Way and Akio Way only. In November 2019, ADA compatible curb ramps were being installed at the intersection of Trinidad Drive and Akio Way by the City of San Jose.

Pedestrian destinations in the vicinity of ACDS include Greystone Park, located just north of the ACDS campus, Bret Harte Middle School and Leland High School, both located east of the ACDS campus, and Los Alamitos Creek Trail, located along the north side of Camden Avenue, north of the ACDS campus (see Figure 1).



Figure 2 Existing ACDS Campus

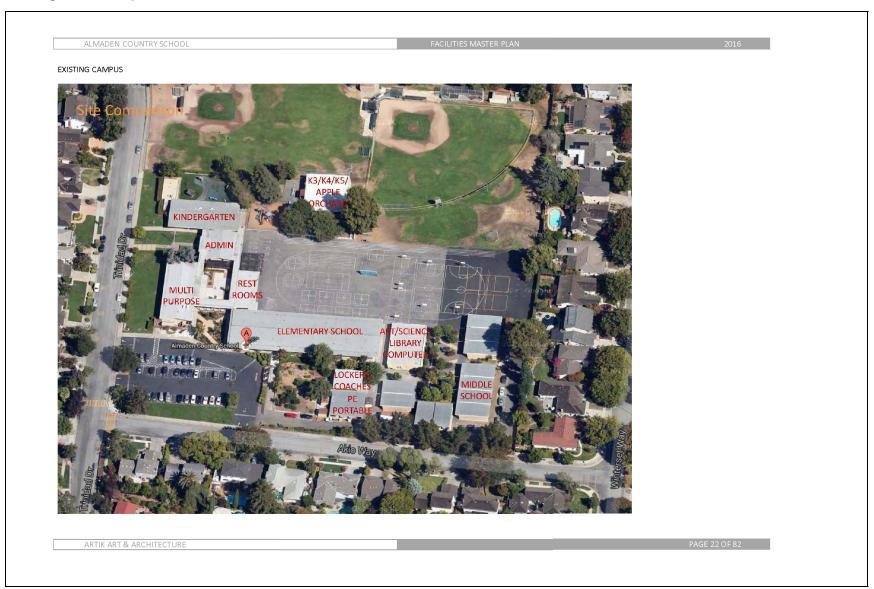




Figure 3
Existing School Signs and Pavement Markings





<u>Observed Existing Deficiencies.</u> The existing curb ramps at the intersection of Trinidad Drive and Mt. Carmel Drive include non-ADA compatible ramps.

Existing Site Access and Circulation Procedures

ACDS currently implements pick-up and drop-off procedures which emphasize in the safety of children and the consideration of and politeness towards the adjacent residential neighborhoods (pick-up/drop-off procedures are available at the school website under parents/resources/for new ACDS families). The procedures include the following:

- Students should not arrive at the school prior to 7:50 AM.
- Drop-off lane should be used for all children in grades 1 through 8.
- Parents must place an ACDS name card on the passenger side visor showing the last name and grade level of the child being picked-up.
- The drop-off/pick-up area must be access by making a right-turn in only at the Akio Way driveway. No
 left-turn in movements are allowed at the Akio Way driveway during the school peak hours (signs
 instructing of this are posted at the Akio Way driveway).
- School traffic should not make a right-turn onto Akio Way from Trinidad Drive.
- School traffic should not make a U-turn at the intersection of Winterset Way/Akio Way.
- Parents must use marked crosswalks to bring children into the school campus when walking or parking on the street.
- Parents must use the Trinidad Drive inbound driveway if you must park within the parking lot during pick-up/drop-off times, and use the same driveway to exit the site.

Existing Traffic Volumes and School Trip Generation

Turning-movement counts at the intersection of Trinidad Drive and Akio Way and trip generation counts at ACDS were conducted on Thursday February 28, 2019 during the school peak hours.

The traffic counts were utilized to quantify the amount of vehicular and pedestrian traffic on the adjacent roadways during the school's peak hours, the amount of traffic that is currently generated by the school, and the observed travel patterns of the existing school traffic. The collected count data revealed the following information:

- The school AM peak hour occurs between 7:15 and 8:15 AM, and the after school peak-hour occurs between 2:30 and 3:30 PM.
- A total of 65 and 99 pedestrians were observed crossing the intersection of Trinidad Drive and Akio Way during the AM and after school peak hours, respectively.
- The peak 15-minute periods for both vehicular and pedestrian traffic at the Trinidad Drive/Akio Way intersection occurred between 7:45-8:00 AM and between 3:00-3:15 PM, with traffic volumes during these 15-minute periods representing approximately half of the total peak-hour traffic.
- Traffic volumes on the adjacent roadways were measured to be larger during the AM peak-hour than the after school peak-hour.
- The existing school currently generates approximately 414 AM peak-hour trips (225 inbound and 189 outbound trips) and 245 after school peak-hour trips (105 inbound and 140 outbound trips).
- Approximately 64% of the drop-offs in the morning occurred within the school site while the remaining 36% of the parents parked on the adjacent streets and walked their children to school. After school, approximately 57% of the total student pick-ups occurred on site while approximately 43% of the parents parked on the street.



- The peak student drop-off and pick-up activities occurred between 7:45 and 8:00 AM and between 3:00 and 3:15 PM, respectively, when more than half of the total drop-offs/pick-ups occurred. These 15-minute peak periods also coincide with the observed peak 15-minute intersection counts.
- The traffic counts at the Akio Way driveway show that one and three vehicles during the AM and after school peak hours, respectively, were observed to exit the school site via the Akio Way driveway.
 However, it should be noted that although this occur during the school peak hours, it occurred during the last 15 minutes of the one-hour peak-period (8:15-8:30 AM and 3:15-3:30 PM periods) when drop-off/pick-up activities were concluding.

Figure 4 shows the total peak-hour intersection turn-movement counts and the peak-hour school-generated traffic currently accessing the school site driveways and those parking on the adjacent streets.

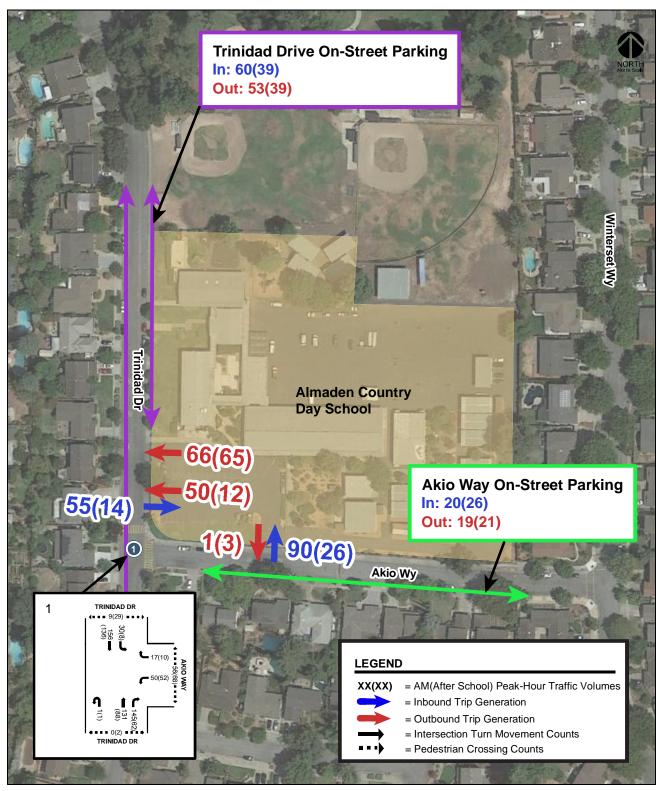
Existing Traffic Conditions

Field observations were conducted during the school peak hours on March 7, 2019. Traffic conditions were observed at the school site and along the surrounding roadway network to identify any existing traffic issues. The following conditions were observed during the school peak hours:

- ACDS traffic accessing the drop-off area made a right-turn into the Akio Way driveway and exited the site via the Trinidad Drive outbound driveway. (ACDS recommended procedures)
- ACDS traffic entering the site via the Trinidad Drive two-way driveway were observed to park, walk their children to school, and exit the site via the same driveway. (ACDS recommended procedures)
- During the peak-hour, a minimum of two parking spots were observed to be available within the school parking lot as parents were continuously entering, parking, and exiting the site.
- The majority of ACDS traffic accessing the school site via Trinidad Drive parked along Trinidad Drive
 and walked to the school. However, a few parents traveling northbound on Trinidad Drive were
 observed to complete a U-turn midblock along the school frontage to park on the west side of the
 street when no on-street parking was available on the east side of the street.
- A few vehicles were observed to turn onto Akio Way from Trinidad Drive, travel eastbound to the Winterset Way/Akio Way intersection, complete a U-turn and travel back to enter the school site via the Akio Way driveway, despite ACDS recommended procedures.
- The maximum inbound queue length at the Akio Way driveway was observed to extend for approximately 275 feet beyond the driveway, in the westbound direction along Akio Way, during the AM peak-hour. Assuming the average length of a vehicle to be 25 feet, this represents approximately 11 vehicles. The maximum vehicle queue length was observed to occur once and it lasted no more than 2-3 minutes.
- A 2 to 3 vehicle queue was observed to extend beyond the Akio Way driveway two to three times during the peak-hour. The average drop-off/pick-up queue length was observed to accommodate within the school parking lot.
- It was observed that during the peak-hours, it takes a vehicle approximately 1 minute and 15 seconds
 to travel from the Akio Way driveway, access the drop-off area, and exit the site via the Trinidad Drive
 outbound driveway. The distance, along the drop-off lane, between the Akio Way driveway and the
 Trinidad Drive outbound driveway is approximately 300 feet (12 vehicles).
- The total maximum observed vehicle queue length during the school peak hours is approximately 575 feet, or 23 vehicles, extending from the first position in the drop-off area (near the Trinidad Drive driveway) to the end of the queue on Akio Way.
- No inbound queues were observed extending beyond the Trinidad Drive two-way driveway.
- Simultaneously, a relatively large number of vehicles (non-project traffic) were observed to travel from Trinidad Drive to Akio Way, Winterset Way, and Summerleaf Drive to drop-off Leland High School students along Bret Harte Drive, near Camden Avenue. Conflict between ACDS traffic and Leland High traffic was minimal due to the opposing travel patterns.



Figure 4
Existing Peak-Hour Intersection Turn-Movement Counts and ACDS Trip Generation





With the exception of a few U-turn movements that were observed to be made by school traffic at the Winterset Way/Akio Way intersection and along Trinidad Drive, no other traffic access and circulation issues were observed during the school peak hours. Fifteen to 20 minutes prior to the beginning of the school day, Trinidad Drive was observed to have most of its on-street parking available, which was all occupied by the time school started. A few ACDS vehicles were observed to park as far as Mt. Carmel Drive, along the south side of the street and just east of Trinidad Drive, and walk to the school. The drop-off/pick-up area was observed to operate efficiently with multiple vehicles being loaded/unloaded simultaneously and the children being ready for pick-up by the time their vehicle arrived at the pick-up lane as a result of the family's last name being displayed on the vehicle. School staff was observed at the drop-off area helping load/unload students into/from their vehicles. One staff member was positioned at the Akio Way driveway supervising site access and the implementation of ACDS recommended procedures.

Overall, field observations revealed that the current ACDS-recommended school access and circulation procedures are followed by the majority of the school traffic. With the existing complete adjacent roadway network (including existing school signage, pavement markings, marked crosswalks, ADA-compatible curb ramps, and continuous sidewalks), along with the implementation of the recommended school access procedures, it can be concluded that the existing vehicular school access and circulation operations are adequate.

Pedestrian Access

The surrounding pedestrian facilities, including sidewalks, marked crosswalks, and curb ramps, provide a continuous pedestrian network between the school and the surrounding neighborhood. No ACDS students were observed riding their bikes to school, and the observed walking students were students whose parents parked on the street and walk their students to school. Under the existing layout of the parking lot and school campus entrance, students that are not dropped-off at the drop-off area have to navigate through the parking lot and cross the vehicles lined up within the drop-off lane to enter the school. However, the parking lot includes marked pedestrian pathways connecting the sidewalks on Trinidad Drive to the parking lot and across the drop-off lane to the school entrance. In addition, during our field observations, a staff member equipped with an orange safety vest and a stop sign was located at the pedestrian pathway across the drop-off lane assisting pedestrian crossing between the parking lot and the school entrance. Although it is less than ideal to have pedestrians cross the drop-off lane, the marked pedestrian pathway and assigned staff member facilitate pedestrian access to the school by alerting drivers and providing a single defined crossing point between the parking lot and the school entrance.

No crossing guards were observed at the intersection of Trinidad Drive and Akio Way. The intersection count data shows that approximately 65 to 99 pedestrians cross the intersection of Trinidad Drive and Akio Way during the school peak hours, including the south leg of the intersection (two crossing observed during the after school peak-hour), where no marked crosswalks are found.

Observed Existing Deficiencies. A few parents traveling northbound on Trinidad Drive were observed to complete a U-turn midblock along the school frontage to park on the west side of Trinidad Drive. A few vehicles also were observed to complete a U-turn at the Winterset Way/Akio Way intersection to enter the school site via the Akio Way driveway. This is contradictory to the site access procedures recommended by ACDS.

No crossing guards were observed at any of the surrounding intersections.

Project Conditions

The Almaden Country Day School Facility Master Plan consists of improvements to the existing school campus. Student enrollment at the school is not proposed to be increased above historical levels with implementation of the Master Plan, resulting in no additional school traffic. The proposed improvements, however, would result in changes to the school's parking lot and pick-up/drop-off area, resulting in changes to vehicular access and circulation in the immediate vicinity of the school campus, as well as on-site circulation for both vehicles and pedestrians.



Proposed Almaden Country Day School Master Plan

The ACDS Master Plan is proposed to be completed in phases over a 15-year period. Most of the construction would include improvements to the school on-site facilities and not affect site access and circulation. Changes to the school parking areas (and access/circulation) would occur during the first phase of development and at buildout of the Master Plan. The main components of the Master Plan include the following:

Phase 1 of Master Plan

The existing portable classrooms located along the south project site boundary would be relocated to the north side of the campus. In their place, a new future Event Center building would be constructed. The existing school parking lot would remain unchanged under this phase, however, the existing inbound access driveway along Akio Way would be closed off during the school's drop-off/pick-up times and access to the drop-off area would be provided via a new driveway along Akio Way, at the southeast corner of the school site. The new driveway would connect to the existing fire lane that runs along the site's southern and eastern boundaries, providing access to both the drop-off area and the parking spaces located along the eastern fire lane. An additional 10 parking spaces also are being proposed along the fire lane and one additional space within the parking lot under this development phase, for a total of 77 parking spaces provided within the school site (43 within the parking lot and 34 along the fire lane).

The layout of Phase 1 of the ACDS Master Plan is shown on Figure 5.

Buildout of the Master Plan

At the completion of the ACDS Master Plan, classrooms, administration buildings, and other school facilities within the site would have be replaced and/or relocated. New school facilities would include an amphitheater, a library, an auditorium, a garden, and an event center. In addition, at buildout of the Master Plan, two separate parking areas (and drop-off areas) would serve the school: one located along Trinidad Drive (west parking lot) and a second one located at the southeast corner of the project site (east parking lot). Two driveways each along Trinidad Drive and Akio Way would provide access to the new parking lots.

Once both parking lots are completed, the Trinidad Drive drop-off area would be designated for kindergarten and elementary grades while the Akio Way drop-off area would be designated for the middle school grades. Seventeen parking spaces are proposed within the Trinidad Drive parking lot and would be designated for staff and visitors. Within the Akio Way parking lot, 78 staff parking spaces are being proposed. A total of 95 parking spaces would be provided to serve the school within both parking lots at buildout of the Master Plan.

The ACDS Master Plan is shown graphically on Figure 6.

Project Transportation Network

No off-site improvements are being proposed as part of the ACDS Master Plan. Therefore, the surrounding transportation network would be the same as described under existing conditions.

Project Traffic Volumes

No additional traffic is projected to be generated with implementation of the proposed ACDS Master Plan. Student enrollment would remain unchanged and the proposed new auditorium/theater is unlikely to generate traffic during the peak hours because new events taking place at the auditorium are anticipated to occur after 6:00 PM. School-related events planned to take place in the proposed auditorium and gymnasium during the day are currently taking place elsewhere within the school campus. Therefore, with implementation of the proposed project, the school peak-hour traffic is projected to remain the same as presented under existing conditions.



Figure 5
Almaden Country Day School Master Plan – Phase 1

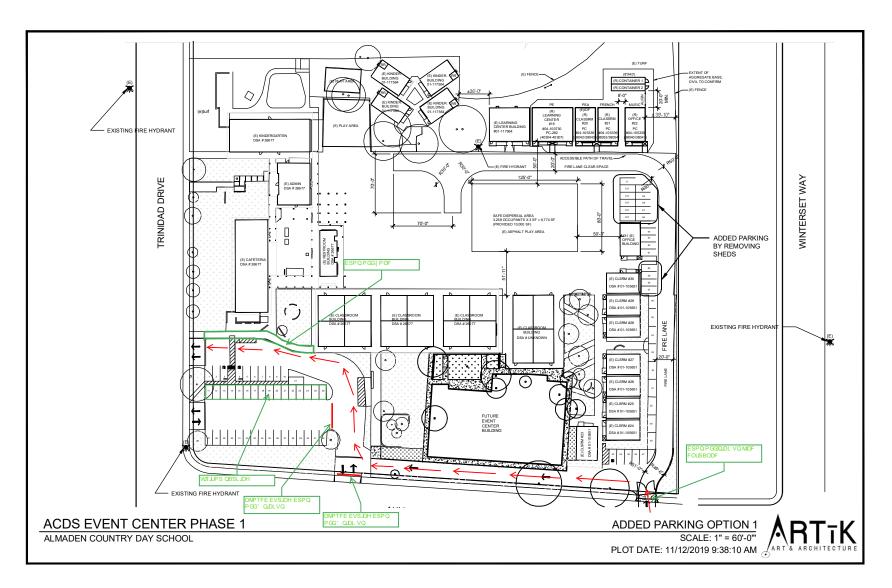
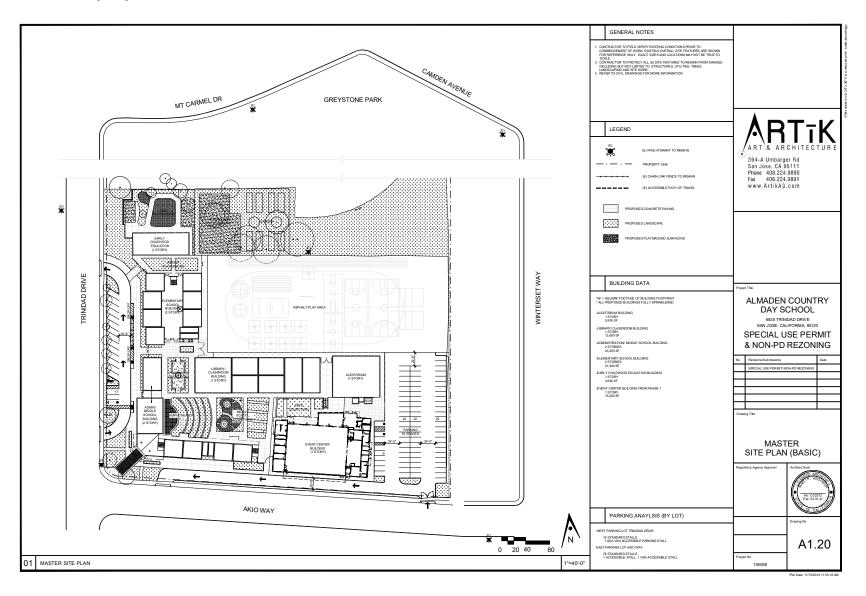




Figure 6
Almaden Country Day School Master Plan – Buildout





ACDS Master Plan Conditions

Phases 1 and buildout of the ACDS Master Plan include changes to the existing school parking areas which would result in changes to the existing site access and on-site circulation. The proposed construction and relocation of other school facilities within the site would not have an effect on traffic operations on-site or along the surrounding roadway network. For this reason, the evaluation of the ACDS Master Plan focuses on Phases 1 and buildout of the Master Plan (shown on Figures 5 and 6, respectively).

Phase 1 Evaluation

Phase 1 of the Master Plan would change the access to the drop-off area from the existing Akio Way inbound driveway (which would be closed off during the school's drop-off/pick-up times) to a new access driveway along Akio Way, at the southeast corner of the school site. However, drop-off/pick-up procedures would remain unchanged. Phase 1 would result in minimal disruption to the existing drop-off and pick-up activities on-site. As mentioned previously, 11 additional parking spaces (for a total of 77 parking spaces) would be provided after completion of Phase 1.

Site Access

With the completion of Phase 1, vehicular access to the school site would be very similar to the existing access. Inbound access to the drop-off lane would continue to be provided via Akio Way (new driveway), and outbound access via Trinidad Drive (existing driveway). The existing driveways and access on Trinidad Drive would remain unchanged. During the off-peak hours, the existing Akio Way driveway would be open. All current ACDS recommended access and circulation procedures would continue to apply to the site access under Phase 1.

Both the existing driveways on Trinidad Drive and Akio Way are approximately 32 feet wide, satisfying City of San Jose driveway design guidelines that require commercial driveways to be 16 to 32 feet wide. The proposed new driveway on Akio Way must be designed adhering to City of San Jose design guidelines.

Pedestrian Access

Pedestrian traffic would continue to use the existing sidewalks and crosswalks to access the school campus. With installation of the new ADA compatible curb ramps at the intersection of Trinidad Drive/Akio Way and the continuous sidewalks available connecting the school site to the adjacent neighborhoods, adequate pedestrian access from the adjacent neighborhoods would be provided under Phase 1. Additionally, the site plan also shows the existing pedestrian pathway that connects the school parking lot with the school entrance would remain under Phase 1.

With implementation of Phase 1, some school pedestrian traffic may continue to cross the Trinidad Drive/Akio Way intersection to access the school campus. Both local and State guidelines include pedestrian and vehicular volume thresholds that identify the potential need for an adult crossing guard at intersections (minimum local and State pedestrian volume thresholds are 20 and 40 children crossing the intersection during one hour, respectively). Other factors that are considered in determining the need for an adult crossing guard include the width of the roadway, age of school children, existing traffic controls, distance of crossing from the school's main entrance, speed of traffic, and walking speed. Ultimately, the City determines the need for and feasibility of an adult crossing guard at an intersection.

It should be noted that, according to ACDS administration, the school has previously tried to work with the City of San Jose to implement crossing guards at the Trinidad Drive/Akio Way intersection. However, their attempts have been unsuccessful since a potential crossing guard must be employed by the School District in order to be trained and certified as a crossing guard by the San Jose Police Department. Therefore, it is recommended that if determined feasible to train and certify a crossing guard for this location, the school should work with the City of San Jose and the Police Department to provide a crossing guard at this location.

Existing School Access Measures that Need to Continue under Phase 1

The following are existing ACDS recommended school access and circulation measures/procedures that must continue to be implemented during the school's peak hours in order to continue to provide adequate site access/circulation operations. The drop-off area refers to the area adjacent to the school campus where



student loading/unloading takes place, while the drop-off lane refers to the drive aisle that connects the Akio Way driveway to the drop-off area. These measures are illustrated on Figure 7 and some are also shown on the site plan as planned measures.

- Continue to implement existing site access procedures, with the required modifications as a result of the proposed new access driveway on Akio Way. This includes providing inbound access to the dropoff area via Akio Way and outbound access via Trinidad Drive. (Shown on the site plan)
- Continue the use of name cards displayed on the passenger side visor to help expedite pick-up procedures.
- Continue to prohibit left-turns into the Akio Way driveway. This avoids conflicting movements at the Akio Driveway and prevents vehicular queues from forming along the eastbound direction of Akio Way.
- Continue to provide all access to the parking area via the Trinidad Drive two-way driveway. (Shown on the site plan)
- Continue to prohibit vehicular access between the parking lot and the drop-off lane. (Shown on the site plan)
- All parents/students walking or parking on the street must continue to access the school campus via the marked crosswalks and pathways, avoiding crossing mid-block or at unmarked locations.
- Continue to emphasize that no U-turns should be completed mid-block or at the intersection of Winterset Way/Akio Way.

On-Site Circulation

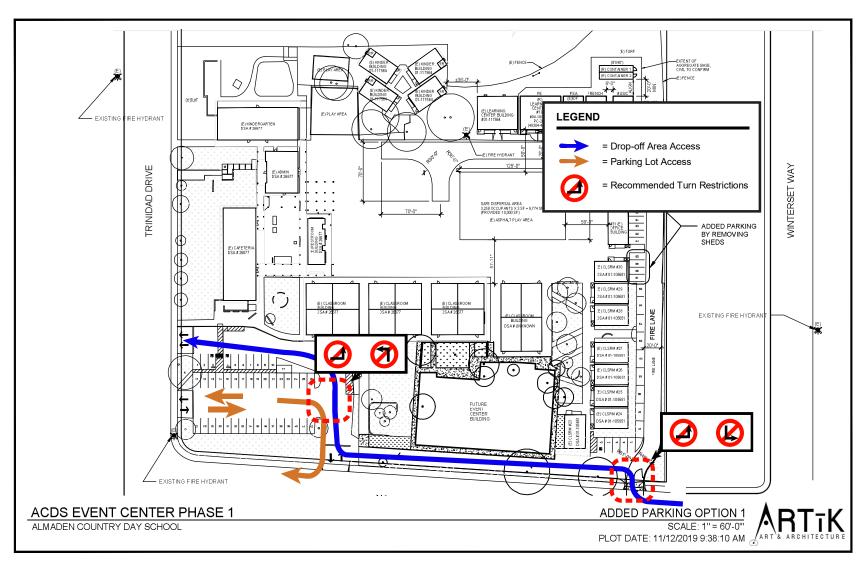
With the proposed parking and drop-off area layout at the completion of Phase 1, the on-site circulation would be relatively the same as under existing conditions. School traffic would enter the site via the new proposed driveway on Akio Way, travel westbound along the existing fire lane to the parking lot and drop-off area, then exit the site via the existing outbound driveway on Trinidad Drive. With the exception of ten parking spaces located across from the drop-off area, no parking would be provided along the drop-off lane, eliminating the conflict between parking vehicles and drop-off traffic and allowing for a continuous flow of traffic through the drop-off lane. At the parking spaces located across from the drop-off area, minimal activity is anticipated during the drop-off/pick-up periods since eight of the ten parking spaces would be assigned as staff parking and the other two would be accessible parking spaces. The access lane providing access between the new Akio Way driveway and the parking area is approximately 18 feet wide, adequate width for one-way access.

The site plan shows the existing pedestrian pathway in the parking lot to continue to provide a connection between the existing sidewalks along Trinidad Drive, the parking lot, and the school campus. This pedestrian connection, in conjunction with the staff member assisting pedestrian crossing of the drop-off lane (existing condition), would continue to concentrate pedestrian crossing of the drop-off lane to a single point and minimize pedestrian/vehicle conflict within the parking lot.

Overall, school staff/parent volunteers should continue to be present within the parking and drop-off areas to help direct traffic, assist students in and out of their vehicles, and prevent drivers and pedestrians from completing movements that would jeopardize their safety.



Figure 7
Existing Access and On-Site Circulation Procedures to Remain Under Phase 1





Truck Access and Circulation

The proposed new site layout must continue to provide adequate access to larger vehicles, such as garbage trucks and emergency trucks. Trash collection most likely would occur on-site. The existing driveways on Trinidad Drive and Akio Way are both 32 feet wide, providing adequate width for larger vehicle access.

Emergency vehicles could enter the site via the Trinidad Drive or the Akio Way driveways to access the parking lot, drop-off area, and the school campus. The proposed new driveway on Akio Way, which also would provide direct access to the fire lane, must be designed to accommodate larger vehicle traffic access and circulation, including adequate width and turn radii.

Recommendations

- All site driveways and drive aisles must be designed to the satisfaction of City of San Jose design guidelines, including the minimum required width for adequate emergency vehicle access.
- It is recommended that the east side of the fire lane (north of the proposed new Akio Way driveway) include red-curb markings and signage prohibiting the parking/stopping of vehicles along this side of the fire lane (parking spaces are located along the west side of the fire lane).

Vehicle Queue Length

The maximum vehicle queue observed at the school site during the school peak hours was approximately 575 feet, or 23 vehicles.

Under the proposed parking lot/drop-off area layout at the completion of Phase 1, the distance between the first position in the drop-off area and the new Akio Way driveway would be approximately 600 feet, or 24 vehicles. Based on the observed existing queue length, after the completion of Phase 1, the maximum vehicle queue from the drop-off area would be able to store within the school site.

The construction of the new site access on Akio Way is projected to improve operating conditions along Akio Way by providing additional queue storage capacity on site, resulting in the elimination of standing vehicular queues along westbound Akio Way.

Parking

At the completion of Phase 1, an additional 11 parking spaces would be provided on site, for a total of 77 spaces serving the school.

The City of San Jose Zoning Code (Section 20.90.060) indicates that the number of required parking spaces for elementary schools (K-8), both private and public, is 1 parking space per teacher plus 1 per employee. ACDS currently has 77 faculty and staff members, requiring a total of 77 parking spaces. Therefore, after completion of Phase 1, ACDS would provide adequate parking, based on the City of San Jose parking requirements.

ADA Compliance

Per the 2016 California Building Code (CBC) Table 11B-208.2, four ADA compliance accessible parking spaces are required for projects providing 76 to 100 parking spaces. Of the required accessible parking spaces, one van accessible spaces is required.

The Phase 1 site plan shows a total of three accessible parking spaces on site, two located adjacent to the pedestrian pathway, across from the drop-off area, and a third located north of the new Akio Way driveway. The accessible parking spaces are located within what appears to be the shortest distance between the parking areas and the school campus. However, the proposed number of accessible parking spaces would be one accessible parking space less than the ADA requirements.

Recommendations

 Designate one additional parking space as an accessible parking space in order to satisfy ADA requirements.



Phase 2 Evaluation

Buildout of the Master Plan would include two separate parking areas serving the school: one located along Trinidad Drive (west parking lot) and a second one located at the southeast corner of the project site (east parking lot).

Site Access

With the completion of the Master Plan, vehicular access to the school site during the school's peak hours would be split between two parking lots/drop-off areas: the Trinidad Drive/west parking lot/drop-off area and the Akio Way/east parking lot/drop-off area. The Trinidad Drive drop off area would be designated for kindergarten and elementary grades while the Akio Way drop-off area would be designated for the middle school grades. In addition, the parking spaces located within the Trinidad Drive parking lot would be designated for staff and visitors.

Two one-way driveways (one inbound and one outbound) along each Trinidad Drive and Akio Way would provide access to the drop-off areas and parking lots. The inbound access along Trinidad Drive would be located near Akio Way while the outbound driveway would be located approximately 300 feet north of Akio Way. The inbound access along Akio Way would be located at the southeast corner of the project site and the outbound driveway would be located near Trinidad Drive (see Figure 6).

The number of vehicles entering and exiting each of the site driveways was estimated based on the existing trip generation, assuming an equal number of students per grade level, and conservatively assuming that all student drop-offs/pick-ups would occur within the drop-off areas. Based on these assumptions, it is estimated that approximately 151 and 70 vehicles would access the Trinidad Drive drop-off area during the AM and after school peak hours, respectively, while 74 and 35 vehicles would access the Akio Way drop-off area during the AM and after school peak hours, respectively (see Figure 8). The number of inbound vehicles at the Trinidad Drive driveway is a conservative estimate since it assumes all parents would utilize the drop-off lane. However, some parents may wish to walk their lower-grade students to class requiring them to park on site or on the adjacent streets.

Pedestrian traffic would continue to use the existing sidewalks and crosswalks to access the school campus. The new main school entrance would be located at the southwest corner of the site providing a direct connection between the school campus and the adjacent sidewalks/crosswalks, eliminating the need for students to walk through the parking lot.

Existing School Access Measures that Need to Continue under Buildout Conditions

The following are existing ACDS recommended school access and circulation measures/procedures that must continue to be implemented during the school's peak hours in order to continue to provide adequate site access/circulation operations at the completion of the Master Plan.

- Continue to access the Akio Way drop-off area by making a right-turn only. Left-turn inbound access at the Akio Way driveway should continue to be prohibited during the school's peak hours.
- Exit the Akio Way driveway by making a right-turn only.
- Parking restrictions along the project site frontage on Akio Way should remain to be able to store the potential inbound vehicle queue length from the Trinidad Drive parking lot.

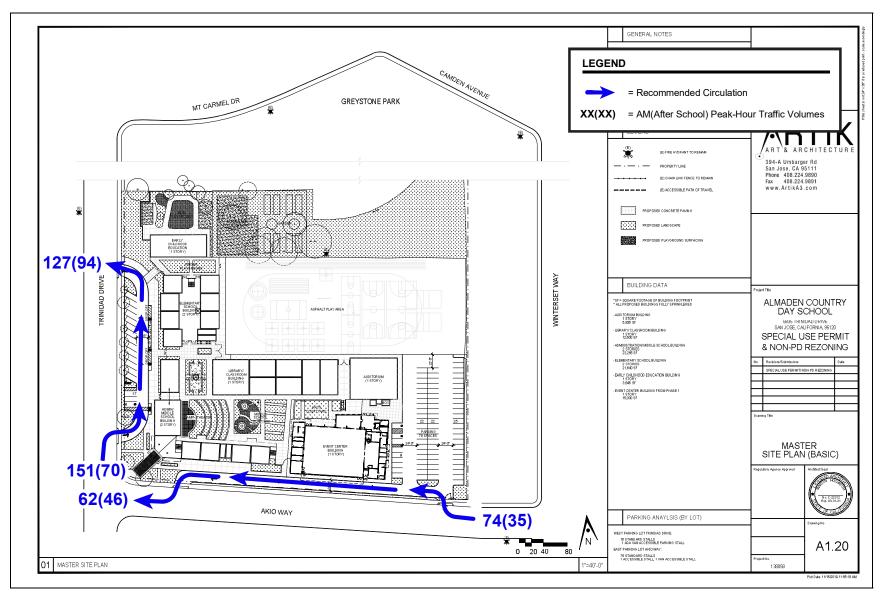
Recommendations

The following are recommendations to be implemented during the school's peak hours.

- Continue to access the Trinidad Drive drop-off area by making a right-turn only. This would avoid queue lengths from forming along the southbound direction on Trinidad Drive.
- Consider balancing the amount of traffic utilizing each of the drop-off areas. Based on the proposed drop-off area designation, the Trinidad Drive drop-off area would serve a larger number of students; however, the Akio Way drop-off area would include larger queue storage capacity.



Figure 8
Recommended Access and On-Site Circulation Procedures – Master Plan Buildout





On-Site Circulation

With the proposed parking and drop-off area layouts at the completion of Master Plan, the on-site circulation would be relatively simple: a single one-way drop-off lane would provide access to each drop-off area. At the Trinidad Drive parking lot, parents would enter the drop-off lane, access the drop-off area (east side of the drop-off lane), and exit the site. At the Akio Way driveway, parents would enter the drop-off lane, access the drop-off area (north of the drop-off lane), and exit the site.

Minimal parking activity is anticipated at the Trinidad Drive parking lot during the drop-off/pick-up periods since these parking spaces would be assigned as staff/visitor parking. Vehicles parking within the Akio Way parking lot would be separated from drop-off traffic as soon as they entered the site.

Pedestrian traffic from the Trinidad Drive parking lot would access the school campus via a marked pedestrian pathway located prior to the drop-off area and connecting the parking lot to the school campus. However, pedestrians would have to cross the line of inbound vehicles within the drop-off lane, similar to the existing procedures. Students from the Akio Way drop-off area would be dropped-off directly onto the school campus. Pedestrians walking to the school campus would access the school's main entrance from the adjacent existing sidewalks and marked crosswalks.

Recommendations

The following are recommendations to enhance on-site circulation and safety for both drivers and pedestrians as they circulate the school site during the school peak hours.

- It is recommended that a minimum of five drop-off positions continue to be provided at the drop-off
 areas to be able to load/unload various students simultaneously and expedite drop-off/pick-up
 procedures.
- All crossing of the drop-off lane within the Trinidad Drive parking lot by pedestrians should continue to be done at the marked pedestrian pathway only. Although pedestrian volumes within the Trinidad Drive parking lot are anticipated to be minimal (walking pedestrians would no longer need to cross this parking lot to access the school), it is also recommended that a staff member continues to assist pedestrian crossing at the marked pathway, as it is currently done.

Truck Access and Circulation

The proposed new site layout must provide adequate access to larger vehicles, such as garbage trucks and emergency trucks. All site driveways and internal drive aisles, both existing and proposed, must be designed to accommodate larger vehicle traffic access and circulation, including adequate width and turn radii.

Recommendations

 All site driveways, drive aisles, and drop-off lanes must be designed to the satisfaction of City of San Jose design guidelines, including the minimum required width for adequate emergency vehicle access.

Vehicle Queue Length

The maximum vehicle queue observed at the school site during the school peak hours was approximately 575 feet, or 23 vehicles. This queue length corresponds to the peak traffic conditions that occurred during the AM peak-hour, or more specifically, during the school's peak 15-minute period. The peak 15-minute period in the morning included a total of 70 inbound vehicles at the Akio Way driveway. This equates to a maximum queue length of approximately 3 to 4 vehicles per every 10 vehicles entering the site during the peak 15 minutes.

Under the proposed parking lot/drop-off area layout at the completion of the Master Plan, it is conservatively assumed that all school traffic would enter the site to drop-off/pick-up students. A total of 151 and 74 vehicles are estimated to enter the site via the Trinidad Drive and Akio Way driveways, respectively, during the AM peak-hour. During the peak 15-minute period, approximately 103 vehicles are estimated to access the Trinidad Drive drop-off area and 51 vehicles the Akio Way drop-off area. Based on the observed existing queue length and the estimated number of vehicles accessing each of the drop-off areas, it is estimated that



the maximum queue length at the Trinidad Drive drop-off area would extend approximate 30 vehicles, or 750 feet, extending from the first drop-off position past the Trinidad Drive/Akio Way intersection. This queue length could be shorter, depending on the number of parents that would continue to park and walk their students to class. If it is assumed that the same number of parents that currently park on the street would continue to do so under the Master Plan Buildout conditions, the number of vehicles entering the Trinidad Drive drop-off area during the peak 15-minute period would be 66 vehicles, translating into a 22-vehicle (550-foot) maximum queue length. A queue of this length would continue to extend beyond the Trinidad Drive/Akio Way intersection.

The maximum queue length at the Akio Way drop-off area would extend approximately 17 vehicles, or 425 feet, extending from the first drop-off position to the inbound driveway.

Although the implementation of two drop-off areas and parking lots would eliminate vehicles queues spilling onto Akio Way from the Akio Way driveway, the maximum queue length from the Trinidad Drive parking lot could extend back past the Trinidad Drive/Akio Way intersection, potentially affecting operations at the intersection and conflicting with the outbound traffic from the Akio Way drop-off area.

Recommendations

The following are recommendations to help enhance drop-off/pick-up procedures, improve circulation, and minimize queue lengths from extending onto the adjacent streets at the completion of the Master Plan.

- Continue to provide a minimum of five drop-off positions at each of the drop-off areas, in particular at the Trinidad Drive drop-off area, which is estimated to serve a larger number of students.
- Consider assigning some of the elementary grade students to the Akio Way drop-off area, since this drop-off area would provide a longer drop-off lane for queue storage.
- Consider providing a two-lane drop-off area, in particular at the Trinidad Drive parking lot. This would
 expedite drop-off procedures and reduce vehicle queue lengths. However, two drop-off lanes would
 require extensive monitoring of the drop-off area by staff/parents since children would have to cross
 one line of vehicles. Procedures for a two-lane drop-off area could include lining up five vehicles per
 lane, loading/unloading students into/out of the vehicles, and staff directing vehicles to exit the site
 once all 10 vehicles have completed their drop-off/pick-up.

Parking

At the completion of the Master Plan, 17 parking spaces would be provided within the new Trinidad Drive parking lot and 78 spaces within the Akio Way parking lot, for a total of 95 spaces.

Based on the City of San Jose Zoning Code parking requirements (Section 20.90.060), ACDS is required to provide a total of 77 parking spaces. Therefore, after completion of the Master Plan, the total number of proposed parking spaces would satisfy City of San Jose parking requirements.

ADA Compliance

Per the 2016 California Building Code (CBC) Table 11B-208.2, after completion of the Master Plan, the school would be required to provide four ADA compliance accessible parking spaces. Of the required accessible parking spaces, one van accessible spaces is required.

The Master Plan site plan shows a total of three accessible parking space provided on site, one within the Trinidad Drive parking lot and two within the Akio Way parking lot. The proposed number of accessible parking spaces would be one accessible parking space less that the ADA requirements.

Recommendations

 Designate one additional parking space as an accessible parking space in order to satisfy ADA requirements.



Conclusions

This study was conducted for the purpose of identifying any potential traffic operations issues associated with the ACDS Master Plan, in particular issues related to the operations of the proposed new parking and drop-off areas.

The traffic circulation review study concluded the following:

- The existing school signage and pavement markings satisfy the CA MUTCD recommended signage and crosswalk/pavement markings for school zones.
- Overall, the current ACDS-recommended school access and circulation procedures are followed by
 the majority of the school traffic. With the existing complete adjacent roadway network (including
 existing school signage, pavement markings, marked crosswalks, ADA-compatible curb ramps, and
 continuous sidewalks), along with the implementation of the recommended school access
 procedures, it can be concluded that the existing vehicular school access and circulation operations
 are adequate.

Based on the school's trip generation and proposed improvements, the following recommendations were made:

Phase 1 Recommendations

On-Site Circulation

Overall, school staff/parent volunteers should continue to be present within the parking and drop-off
areas to help direct traffic, assist students in and out of their vehicles, and prevent drivers and
pedestrians from completing movements that would jeopardize their safety.

Truck Access and Circulation

- All site driveways and drive aisles must be designed to the satisfaction of City of San Jose design guidelines, including the minimum required width for adequate emergency vehicle access.
- It is recommended that the east side of the fire lane (north of the proposed new Akio Way driveway) include red-curb markings and signage prohibiting the parking/stopping of vehicles along this side of the fire lane (parking spaces are located along the west side of the fire lane).

Parking

 Designate one additional parking space as an accessible parking space in order to satisfy ADA requirements.

Other Recommended Off-Site Improvements

Based on the assumption that all student drop-off/pick-up activity would occur on site with
implementation of the proposed project, the existing number of pedestrians crossing the Trinidad
Drive/Akio Way intersection would be reduced significantly, also reducing the potential need for a
crossing guard at this location. Therefore, at the completion of Phase 1 of the proposed project, it is
recommended that if determined feasible to train and certify a crossing guard for this location, the
school should work with the City of San Jose and the Police Department to provide a crossing guard
at this location.

Master Plan Buildout Recommendations

These recommendations are in addition to the recommendations made for Phase 1.

Site Access

- Continue to access the Trinidad Drive drop-off area by making a right-turn only.
- Consider balancing the amount of traffic utilizing each of the drop-off areas.



On-Site Circulation

- It is recommended that a minimum of five drop-off positions continue to be provided at the drop-off areas to be able to load/unload various students simultaneously and expedite drop-off/pick-up procedures.
- All crossing of the drop-off lane within the Trinidad Drive parking lot by pedestrians should continue to be done at the marked pedestrian pathway only. A staff member should continue to assist pedestrian crossing at the marked pathway, as it is currently done.

Vehicle Queue Length

- Continue to provide a minimum of five drop-off positions at each of the drop-off areas, in particular at the Trinidad Drive drop-off area, which is estimated to serve a larger number of students.
- Consider assigning some of the elementary grade students to the Akio Way drop-off area, since this
 drop-off area would provide a longer drop-off lane for queue storage. Consider providing a two-lane
 drop-off area, in particular at the Trinidad Drive parking lot.

