Sequoia Union High School District
Menlo Park Small High School Project

Draft Environmental Impact Report - Vol. 1

SCH# 2016022066

July 2016

SUHSD

Sequoia Union High School District
480 James Avenue
Redwood City, CA 94062

NOTICE OF AVAILABILITY
DRAFT ENVIRONMENTAL IMPACT REPORT
FOR THE MENLO PARK SMALL HIGH SCHOOL PROJECT

Date: July 8, 2016

To: California State Clearinghouse, CEQA Responsible and Trustee Agencies, federal agencies, San Mateo County Clerk, and interested individuals and organizations

Subject: **Notice of Availability of a Draft Environmental Impact Report for the Menlo Park Small High School Project (SCH# 2016022066)**

Lead Agency: Sequoia Union High School District - 480 James Avenue, Redwood City, CA 94062

Applicant: Same as Lead Agency

Project Title: Menlo Park Small High School

Project Location and Description: The Sequoia Union High School District (SUHSD, or the District) has prepared a Draft Environmental Impact Report (EIR) to evaluate the potentially significant environmental impacts that may result from implementation of the District's proposed Menlo Park Small High School Project.

The proposed Menlo Park Small High School Project would be located at 150 Jefferson Drive, in Menlo Park, in San Mateo County. This project location consists of a single, developed land parcel (Assessor's Parcel Number [APN] 055-243-030) which is approximately 2.1 acres in size and centered on 37°28'56" north latitude and 122°10'26" west longitude. The site is located in the City's Bayfront Area (also referred to as the M2 Planning Area), approximately 0.2 miles north of the U.S. 101 and the Dumbarton Rail Corridor, and approximately 0.2 and 0.3 miles south and east of Bayfront Expressway (State Route 84) and Marsh Road, respectively. 150 Jefferson Drive is currently occupied by an approximately 44,000 square-foot office / warehouse building with associated parking and landscaping.

The SUHSD is proposing to construct and operate a small, three-story high school facility with capacity to accommodate up to approximately 400 high school students and 35 faculty and staff. The proposed project would support high quality education and avoid overcrowding at SUHSD schools, particularly in the southern part of the District. The SUHSD would open the new school in time for the 2018-2019 school year. The proposed project would involve the following components: removal of existing site facilities and construction of a new high school, operation of the new high school, and a potential partnership with the San Mateo County Community College District.

On October 29, 2015, the SUHSD and the California Department of Toxic Substances Control (DTSC) Schools Division entered into an Environmental Oversight Agreement related to preparation of a Preliminary Environmental Assessment (PEA) report (DTSC Site Code 204273; Envirostor ID 60002163). The purpose of the PEA was to to determine whether a release or potential release of hazardous substances that could pose a threat to human health (via ingestion, skin contact, or inhalation) or the environment could occur as a result of project construction and long-term operation. As described in the Draft EIR, the PEA prepared for the

Menlo Park Small High School Project determined the presence of chemicals such as lead and VOCs in site soils, soil vapor, and groundwater do not pose a risk to human health and the environment and, therefore do not require further investigation or remedial action. On June 13, 2016, the DTSC approved the PEA and found no further investigation or remediation of the site is required. Although the proposed school property has been subject to DTSC regulatory oversight, it is not a site listed pursuant to Government Code section 65962.5 by the DTSC.

Anticipated Significant Environmental Effects: The Draft EIR identifies potentially significant impacts on the following resources: Traffic (intersection level of service and traffic volumes on roadways), Air Quality (fugitive dust), Biological Resources (nesting birds and trees), Cultural Resources (undocumented resources), Hazards and Hazardous Materials (unanticipated contamination), Hydrology and Water Quality (storm water and flooding), and Public Services and Utilities (infrastructure impacts). Mitigation measures are proposed to avoid and / or substantially reduce the proposed project's potential effects on Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, and Public Services and Utilities to less than significant levels. Mitigation measures are also proposed to reduce the proposed project's potential to generate vehicle trips, but impacts to intersection operations and roadway segments would remain significant and unavoidable on both a project- and cumulative-level.

Request for Comments: The purpose of this Notice of Availability is to request comments on the Draft EIR the District has prepared for the Menlo Park Small High School Project from state responsible and trustee agencies, federal agencies, and any other person or organization concerned with the environmental effects of the project. The starting and ending dates for the review period during which time the SUHSD will receive comments on the Draft EIR are July 8, 2016 and August 22, 2016, respectively. **Please send your written response by the earliest possible date, but no later than 5 PM on Monday, August 22, 2016 to Mr. Matthew Zito, Chief Facilities Officer, 480 James Avenue, Redwood City, CA 94062 or to smallhighschool-eir@seq.org (enter "Draft EIR" in the 'Subject' line).** Agency responses should include the name of a contact person at the agency.

Document Availability: Hardcopies of the Draft EIR are available for review at the following locations:

- SUHSD Main Office
  480 James Avenue
  Redwood City, CA 94062
- Menlo Park Public Library
  Main Library
  800 Alma Street
  Menlo Park, CA 94025
- Menlo Park Public Library
  Belle Haven Branch
  413 Ivy Drive
  Menlo Park, CA 94025

The Draft EIR may also be reviewed or downloaded from the SUHSD's website: www.seq.org/construction

Signature: _____ Date: 7.8.16

Title: James Lianides, Superintendent

Sequoia Union High School District
Menlo Park Small High School Project

Draft Environmental Impact Report - Vol. 1

SCH# 2016022066

July 2016

SUHSD

Sequoia Union High School District
480 James Avenue
Redwood City, CA 94062

SEQUOIA UNION HIGH SCHOOL DISTRICT
MENLO PARK SMALL HIGH SCHOOL PROJECT
DRAFT ENVIRONMENTAL IMPACT REPORT

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

VOLUME 2

APPENDICES

LIST OF ACRONYMS, ABBREVIATIONS, AND SYMBOLS

Acronym / Symbol	Full Phrase or Description
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ADA	Americans with Disabilities Act
ADT	Average daily traffic
ALUC	Airport Land Use Commission
ALUP	Airport Land Use Plan
APN	Assessor's Parcel Number
BAAQMD	Bay Area Air Quality Management District
BAU	Business As Usual
BMPs	Best Management Practices
CA	California
CAAQS	California Ambient Air Quality Standards
CalEPA	California Environmental Protection Agency
Caltrans	Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCF	Hundred Cubic Feet
CCR	California Code of Regulations
CDC	California Department of Conservation
CDE	California Department of Education
CDO	Cease and Desist Order
CDFG	California Department of Fish and Game (now CDFW)
CDFW	California Department of Fish and Wildlife (formerly CDFG)
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
CH_4	Methane
CNEL	Community Noise Equivalent Level
CO_2	Carbon Dioxide
CFR	Code of Federal Regulations
CGS	California Geological Survey
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNPPA	California Native Plant Protection Act
CNPS	California Native Plant Society
CO	carbon monoxide
CRHR	California Register of Historic Places
CRPR	California Rare Plant Ranking

LIST OF ACRONYMS, ABBREVIATIONS, AND SYMBOLS

Acronym / Symbol	Full Phrase or Description
CSSC	California Species of Special Concern
CTE	Career Technical Education
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
C/CAG	City/County Association of Governments of San Mateo County
dB	Decibel
dBA	Decibels, A-Weighted
dBV	Decibels, Velocity
DNL / Ldn	Day-Night Noise Level
DSA	Division of the State Architect
DTSC	Department of Toxic Substances Control
DWQ	Division of Water Quality
EIR	Environmental Impact Report
EPC	Enrollment Projection Consultants
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Works Administration
GHG	Greenhouse Gases
GIS	Geographic Information System
GWP	Global Warming Potential
HAPs	Hazardous Air Pollutants
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HFCs	Hydrofluorocarbons
HP	Horsepower
HRA	Health Risk Assessment
HRI	Historical Resources Inventory
Hz	Hertz
ITE	Institute of Transportation Engineers
Leq	Average / Equivalent Noise Level
Lmax	Maximum Noise Level
LOS	Level of Service
MBTA	Migratory Bird Treaty Act
MRP	Municipal Regional Permit
MS4	Municipal Separate Storm Sewer System
MTCO2e	Metric Tons of Carbon Dioxide Equivalents
M-2	General Industrial District (Zoning District)
M-3	Commercial Business Park (Zoning District)
m^3	Cubic Meters
NAAQS	National Ambient Air Quality Standards

LIST OF ACRONYMS, ABBREVIATIONS, AND SYMBOLS

Acronym / Symbol	Full Phrase or Description
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NCTC	Northern Chumash Tribal Council
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOP	Notice of Preparation
NO2	Nitrogen Dioxide
NOx	Oxides of Nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
N_2O	Nitrous Oxide
OEHHA	Office of Environmental Health Hazard Assessment
OCPs	Organochlorine Pesticides
O3	Ozone
PCBs	Polychlorinated Biphenyls
PEA	Preliminary Environmental Assessment
PFCs	Perfluorocarbons
PM	Particulate Matter
PM2.5	Fine Particulate Matter
PM10	Coarse Particulate Matter
PPM	Parts per Million
PPV	Peak Particle Velocity
PRC	Public Resources Code
ROG	Reactive Organic Gases
RWQCB	Regional Water Quality Control Board
SCH	State Clearinghouse
SFBAAB	San Francisco Bay Area Air Basin
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
SF6	Sulfur Hexaflouride
SHPO	State Historic Preservation Officer
SHRC	State Historical Resources Commission
SMCCCD	San Mateo County Community College District
SMCWPP	San Mateo Countywide Water Pollution Program
SOx	Sulfates
SO2	Sulfur Dioxide
SR	State Route
SUHSD	Sequoia Union High School District
SVCW	Silicon Valley Clean Water
SWPPP	Storm Water Pollution Prevention Plan

LIST OF ACRONYMS, ABBREVIATIONS, AND SYMBOLS

Acronym / Symbol	Full Phrase or Description
SWRCB	State Water Resources Control Board
TACs	Toxic Air Contaminants
TDM	Travel Demand Management
TIA	Transportation Impact Analysis
TSCA	Toxic Substances Control Act
U.S.	United States
USACE	United States Army Corps of Engineers
USC	United States Code
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	Unites States Geological Survey
UST	Underground Storage Tank
VMT	Vehicle Miles Travelled
VOC	Volatile Organic Compound
V/C	Volume to Capacity
µg	Micrograms
µm	Micrometers
§	Section

This page intentionally left blank.

SUMMARY

The Sequoia Union High School District (SUHSD, or the District) has prepared this Draft Environmental Impact Report (EIR) to evaluate the potentially significant environmental impacts that may result from implementation of the District's proposed Menlo Park Small High School Project. This new, state-of-the-art, small high school would be located on approximately 2.1 acres of land at 150 Jefferson Drive, in the City of Menlo Park, in San Mateo County. In general, this SUHSD project would involve:

- SUHSD demolition of existing facilities at 150 Jefferson Drive;
- SUHSD construction and operation of a new, approximately 45,000 gross square-foot, three-story, small high school capable of serving 400 high school students and 35 faculty and staff;
- A potential partnership with the San Mateo County Community College District (SMCCCD) to allow use of the SUHSD facilities for SMCCCD college instruction

The SUHSD anticipates beginning site demolition in late 2016 and plans to open the new school in time for the 2018-2019 school year (i.e., by August 2018).

S.1 PROJECT LOCATION

The proposed small high school site (150 Jefferson Drive) consists of a single, developed land parcel (Assessor's Parcel Number [APN] 055-243-030) which is approximately 2.1 acres in size and centered on 37°28'56" north latitude and 122°10'26" west longitude. The site is located in the City of Menlo Park's Bayfront / M-2 Planning Area, approximately 0.2 miles north of the U.S. 101 and Dumbarton Rail Corridor, and approximately 0.2 and 0.3 miles south and east of SR 84, respectively (Bayfront Expressway and Marsh Road, respectively). The City of Menlo Park's Suburban Park / Lorelei Manor/ Flood Park neighborhood is approximately 0.2 miles south of the site (across U.S. 101) and the City's Belle Haven neighborhood is approximately 0.4 miles southeast of the site. The proposed school site is bordered by existing office and warehouse land uses. The existing facilities at the proposed school site include an approximately 44,000 square-foot office / warehouse building with associated parking and landscaping.

S.2 PROJECT COMPONENTS

The SUHSD is proposing to construct and operate a small high school facility with capacity to accommodate up to approximately 400 high school students and 35 faculty and staff. The proposed project would support high quality education and avoid overcrowding at SUHSD schools, particularly in the southern part of the District.

S.2.1 Project Construction

Project construction is anticipated to begin in late 2016 and last approximately 18 months. Project construction would begin with the demolition and deconstruction of the existing site facilities. The SUHSD would then rough grade the site pursuant to the final site design and permissible construction practices (i.e., some concrete slabs may be crushed and left in place and some smaller utility lines less than four inches in diameter may be abandoned in place). Geotechnical investigations of the site indicate that artificial fill materials present are suitable for reuse in backfilling and other site construction purposes. Excavation for structural components of the proposed school and potential utility connections may encounter groundwater and thus require dewatering of the site. The SUHSD would test groundwater prior to discharge off-site

and comply with all applicable regulations regarding construction dewatering. Due to the potential for liquefaction and settlement at the proposed school site, the SUHSD is proposing a foundation system consisting of 35 gravity support columns and 20 brace frames. This system would require the SUHSD to install a total of 185 16-inch diameter augercast pressure grouted piles to a depth of 55 feet below ground surface. Following completion of the piles, the SUHSD would proceed with trenching for utilities, pouring the ground floor slab (approximately five inches thick), erecting structural components and framing, and final building construction. Site finishing would include approximately one acre of concrete and asphalt paving plus landscaping. The SUHSD estimates approximately 3,400 cubic yards of cut, with 1,200 cubic yards balanced on site. Thus, the project is anticipated to result in a net export (i.e. off-haul) of approximately 2,200 cubic yards of soil, plus building demolition materials (equal to approximately 4,000 cubic yards).

S.2.2 School Operation

The proposed high school would operate on a traditional schedule. From approximately August or early September through June, classes would be in session from about 8:15 or 8:30 AM to 3:30 or 3:45 PM. Faculty and staff would arrive prior to the start of classroom instruction, and some after school and evening programs (clubs, parent meetings, etc.) would also occur at the school. Thus, the SUHSD anticipates the site would typically be in use by school faculty, students, and staff from approximately 7 AM to 6 PM Monday through Friday. Summer school classes would be offered in June and July; evening and weekend events may also occur at the campus intermittently through the year (e.g., Back to School Night, graduation ceremonies). The proposed Menlo Park Small High School would be open to all SUHSD students; however, the SUHSD anticipates that the proposed school would primarily serve students from the southern part of the SUHSD (i.e., Redwood City, Menlo Park, and East Palo Alto). This is because similar academic programs and curricula are available at other schools in the northern part of the District, which would be closer to students living in the northern part of the District (e.g., Belmont, San Carlos, Redwood Shores). The proposed high school would open with an initial incoming freshman class only. Thus, enrollment during the 2018-2019 school year is estimated to be approximately 100 students. The SUHSD expects the school would reach full capacity (approximately 400 students) by the 2021-22 school year (i.e., when the inaugural freshman class of 2018 are seniors). Due to the size of the proposed school site, school- and site-specific athletic facilities are not proposed. Rather, student athletes participating in basketball, soccer, etc. would use other existing SUHSD facilities, such as the gym at the Stanford Charter School (Myrtle Street in East Palo Alto). In addition, if necessary, the SUHSD would coordinate with local entities to allow student use of other nearby sports fields, courts, and facilities.

S.2.3 Potential SMCCD Partnership

As part of the project, the SUHSD may enter into a partnership with the San Mateo County Community College District (SMCCCD) with the goal to round out the offering of content specific high school courses, which would provide students with the practical and theoretical knowledge to apply to work-based learning environments. The SMCCCD may also use the high school to provide community college courses several nights a week.

S.3 PROPOSED SMALL HIGH SCHOOL DESCRIPTION AND FEATURES

The proposed high school would include state-of-the-art educational programming and facilities for Grade 9 through 12 curricula. The SUHSD has designed the proposed Menlo Park Small High School to reflect an innovative and collaborative spirit. The proposed site layout is

organized around the site's east-west axis to maximize exposure to daylight, as well as views to the bay. The articulated, three-story school building would be approximately 45,000 square feet in size and approximately 50 feet tall on the western and southern sides (i.e., reaching approximately 58.5 feet amsl) and 30 feet tall on its eastern side (i.e., reaching approximately 38.5 feet amsl). The proposed "U"-shaped building configuration would wrap around and allow direct access to an amphitheater-like campus courtyard that would be the signature characteristic and central focus point of the campus (the proposed design would also buffer the courtyard from the adjacent parking area). This courtyard would be used for assemblies, demonstrations, school fundraising and social functions. Tentatively, the school would include eight general classrooms, three science classrooms, two design classrooms, one maker space, a research longue, a performing arts classroom, a student union with associated food service, administrative offices, and support spaces. Due to the project's location near Facebook and other technology company campuses (as well as the outcome of parent and student surveys), the SUHSD anticipates educational programming would include career technical education (CTE) classes, linked learning, and academic content focused on design, technology, and engineering, that prepares students for pursuing both college enrollment and professional careers.

S.4 PROPOSED SCHEDULE

The SUHSD is proposing to have the new Menlo Park Small High School in service by August 2018. Construction of the project would occur over an approximately 18-month period beginning in late 2016. The inaugural freshman class would consist of approximately 100 students supported by approximately 15 faculty and staff. Each subsequent year the school would grow in size by approximately 100 students. By the 2021-22 school year (i.e., when the inaugural freshman class are seniors), the school would reach its capacity of approximately 400 students, supported by 35 faculty and staff.

S.5 PROJECT OBJECTIVES

The SUHSD's objectives for the proposed Menlo Park Small High School Project are:

- To maintain the SUHSD's commitment to education excellence and to continue a strong and varied curriculum that prepares students to graduate and be successful in college and professional careers.
- To support preparation and planning for expected future increase in student enrollment within the SUHSD.
- To establish a new small school site in the southern part of the SUHSD that helps alleviate potential overcrowding at Menlo-Atherton High School and Sequoia High School.
- To establish a new small high school that uses a career technical education / linked learning approach and emphasizes a design, technology, and engineering curriculum.

S.6 SIGNIFICANT IMPACTS AND MITIGATION MEASURES

Consistent with the California Environmental Quality Act (CEQA) and the CEQA Guidelines, this EIR focuses on the potentially significant direct and indirect impacts that could result from implementation of the Menlo Park Small High School Project. This EIR identifies that the proposed Menlo Park Small High School Project could result in up to 10 potentially significant environmental impacts in eight different resource areas, as summarized in Table S-1.

Table S-1 Summary of Menlo Park Small High School Project Significant Environmental Impacts and Mitigation Measures			
Environmental Impact	**Potentially Significant Impact?**	**Mitigation Measure**	**Level of Significance After Mitigation**
Transportation			
Impact TRA-1: The Menlo Park Small High School Project would add peak hour and daily trips to the circulation and transportation system in the vicinity of the school site.	*Yes*	*Mitigation Measure TRA-1A: Prepare and Implement a Travel Demand Management Program for Menlo Park Small High School Students, Faculty, and Staff* By the 2021-2022 school year, the Menlo Park Small High school shall prepare and implement a formal, written Travel Demand Management (TDM) Program for the Menlo Park Small High School that covers school students, faculty, and staff. As part of its program, the school shall designate a central TDM coordinator to oversee the TDM Program and monitor the program's effectiveness. The school shall, at a minimum, evaluate the following TDM measures for inclusion in its written TDM Program: • On-site vehicle parking permits (either free or fee-based) • Preferential and/or free/reduced cost parking for carpools • Adequate, secure bicycle parking • Organized school-wide walk and bike to school day, week, etc. • Promotions and activities to incentivize alternative modes of transportation (e.g., competitions to see which grade level avoids the most vehicle trips) • Use of a web- or mobile-based application to connect students wishing to carpool, • Use of incentives such as prizes and certificates for students who participate in walk / bike to school programs • Notice / awareness of TDM measures in the school media materials (e.g., website, newsletter, etc. • Other measures deemed feasible and appropriate for the school, such as a late start time for the school The TDM Program shall set as its goal a 30 percent mode split for combined student, faculty, and staff transit, pedestrian, bicycle, and carpool trips. The central	*Significant and Unavoidable*

Table S-1 Summary of Menlo Park Small High School Project Significant Environmental Impacts and Mitigation Measures			
Environmental Impact	**Potentially Significant Impact?**	**Mitigation Measure**	**Level of Significance After Mitigation**
		TDM coordinator shall be responsible for surveying school students, faculty, and staff once each year (preferably in the first quarter) to ascertain the most current transportation mode split at the school and the effectiveness of the TDM Program (in accordance with Mitigation Measure TRA-1B).	
		Mitigation Measure TRA-1B: Conduct Menlo Park Small High School Travel Mode Survey Beginning with the 2021-2022 school year, the Menlo Park Small High School shall contract with a qualified transportation planning firm to conduct a student, faculty, and staff travel survey. School staff shall administer the updated survey once per year over a minimum two-day period. The survey shall focus on student, faculty, and staff travel modes, vehicle occupancies, and time of travel to school in the morning and from school in the afternoon. The survey results shall be tabulated to assess current trip generation by mode, time-of-day, and grade or faculty/staff level and used to ascertain the effectiveness of the school's Travel Demand Management Program.	
		Mitigation Measure TRA-1C: Evaluate the feasibility of SamTrans bus / shuttle service The District shall evaluate the feasibility of establishing a dedicated SamTrans bus route or shuttle service for the Menlo Park Small High School. • By December 31, 2019, the SUHSD shall re-initiate contact with SamTrans regarding dedicated bus or shuttle service for the Menlo Park Small High School. • By December 31, 2020, the SUHSD shall complete an evaluation of the technical, economic, and demographic factors that affect the feasibility of dedicated SamTrans bus or shuttle service for the Menlo Park Small High School. • If the SUHSD and SamTrans determine dedicated bus or shuttle service is	

Table S-1 Summary of Menlo Park Small High School Project Significant Environmental Impacts and Mitigation Measures			
Environmental Impact	**Potentially Significant Impact?**	**Mitigation Measure**	**Level of Significance After Mitigation**
		feasible, the SUHSD shall initiate the service as soon as possible, with the goal to provide service by the start of the 2021-2022 school year. If it is determined that such service is not feasible, the evaluation shall consider if, when, and how the obstacles that make such service infeasible should be re-evaluated (e.g., student enrollment is too low and needs to be higher, there is insufficient student density along potential bus routes, etc.).	
Impact TRA-2: The Menlo Park Small High School Project could cause or contribute to conflicts and/or dangerous interactions between pedestrians, bicyclists, and vehicles.	*Yes*	*Mitigation Measure TRA-2A: Safe Routes to School* The Menlo Park Small High School, in coordination with the City of Menlo Park, shall prepare a Safe Routes to School Map that identifies facilities such as traffic lights, crosswalks, and demarcated bikeways that promote safe routes to school. The Menlo Park Small High School shall provide this map to parents and students via school newsletter or other materials (e.g., Back-to-School Night presentation) at least once a year and shall maintain an electronic copy of the map on the school's website at all times. The school shall also provide the map the City of Menlo Park Transportation Division.	*Less than Significant*
		Mitigation Measure TRA-2B: Reduce Off-Campus Student Loading and Unloading The Menlo Park Small High School shall prepare and implement a formal, written policy outlining student loading and unloading procedures for the school. The policy shall: • Describe the student loading and unloading areas at the school • Contain a map depicting student loading and unloading areas • Explicitly describe that off-campus student loading and unloading at adjacent businesses and on adjacent roadways is admonished and discouraged by the school The school shall distribute this policy to each incoming freshman and sophomore at the beginning of the school year (the policy may be included in the Student	

Table S-1 Summary of Menlo Park Small High School Project Significant Environmental Impacts and Mitigation Measures			
Environmental Impact	**Potentially Significant Impact?**	**Mitigation Measure**	**Level of Significance After Mitigation**
		Handbook), and shall also publish the policy in school newsletters and/or other materials at least once a year. As part of this policy, school staff shall, upon receipt of a complaint regarding off-campus student loading and unloading, strive to identify and dissuade the individual responsible for the off-campus loading or unloading from repeating their activity	
		Mitigation Measure TRA-2C: Participate in City of Menlo Park's Bayfront Transportation Management Association The SUHSD shall coordinate with appropriate stakeholders (such as the City of Menlo Park, SamTrans, and local businesses) if and when the City of Menlo Park establishes its Bayfront Transportation Management Association to assess and recommend changes to signage, pedestrian facilities, and other solutions that address pedestrian and bicycle safety concerns and improve traffic circulation in the Bayfront Area.	
Impact TRA-3: The Menlo Park Small High School could result in result in indirect environmental effects resulting from a parking shortage.	*Yes*	*Mitigation Measure TRA-3A: Maximize On-Site Parking* The SUHSD shall maximize on-site parking at the Menlo Park Small High School site. This may be accomplished by designing the eastern perimeter of the site to accommodate daily parking for students/staff or short-term parking for visitors (outside of school drop-off and pick-up periods).	*Less than Significant*
		Mitigation Measure TRA-3B: Identify Off-Campus Parking Areas The Menlo Park Small High School shall engage local businesses and other land uses in the Bayfront Area to identify underutilized or vacant parking areas that could be used by school staff and/or students during times when school is in session. Once areas have been identified, the school shall prepare and implement a formal, written off-campus policy outlining areas where staff and students can find available off-campus parking. The policy shall discourage parking in areas where the school has not reached an agreements and/or understanding the appropriate entity. The school shall also publish the location of off-campus parking areas in	

Table S-1 Summary of Menlo Park Small High School Project Significant Environmental Impacts and Mitigation Measures			
Environmental Impact	**Potentially Significant Impact?**	**Mitigation Measure**	**Level of Significance After Mitigation**
		school newsletters and/or other materials at least once a year.	
		Mitigation Measure TRA-3C: Coordinate with the City on Parking Prohibitions The Menlo Park Small High School shall coordinate with the City of Menlo Park on parking prohibitions on Jefferson Drive. The goal of this coordination shall be to permit temporary, short-term, school-related parking that can be used for visitors, parent-teacher conferences, etc.	
Air Quality			
Impact AIR-1: Implementation of the Menlo Park Small High School Project would generate criteria air pollutant emissions.	*Yes*	*Mitigation Measure AIR-1: Reduce Fugitive Dust Emissions* To reduce potential fugitive dust that may be generated by the Menlo Park Small High School Project during building demolition, site preparation, and building construction activities, the District shall implement the following BAAQMD basic construction measures: • Water all exposed surfaces (e.g., staging areas, soil piles, graded areas, and unpaved access roads) two times per day during construction and adequately wet demolition surfaces to limit visible dust emissions. • Cover all haul trucks transporting soil, sand, or other loose materials off the project site. • Use wet power vacuum street sweepers at least once per day to remove all visible mud or dirt track-out onto adjacent public roads (dry power sweeping is prohibited) during construction of the propose project. • Vehicle speeds on unpaved roads/areas shall not exceed 15 miles per hour. • Complete all areas to be paved as soon as possible and lay building pads as soon as possible after grading unless seeding or soil binders are used. • Minimize idling time of diesel powered construction equipment to five minutes and post signs reminding workers of this idling restriction at access points and equipment staging areas during construction of the proposed	*Less than Significant*

Table S-1 Summary of Menlo Park Small High School Project Significant Environmental Impacts and Mitigation Measures			
Environmental Impact	**Potentially Significant Impact?**	**Mitigation Measure**	**Level of Significance After Mitigation**
		project. • Maintain and properly tune all construction equipment in accordance with manufacturer's specifications and have a CARB-certified visible emissions evaluator check equipment prior to use at the site. • Post a publicly visible sign with the name and telephone number of the construction contractor and SUHSD staff person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The publicly visible sign shall also include the contact phone number for the Bay Area Air Quality Management District to ensure compliance with applicable regulations.	
Biological Resources			
Impact BIO-1: Implementation of the proposed project could result in impacts to nesting birds, and roosting bats	*Yes*	*Mitigation Measure BIO-1A: Avoid and Minimize Impacts to Nesting Birds* The District shall initiate project construction outside of the bird nesting season (defined as the time between September 1st and January 31st). If it is not feasible to start construction outside the bird nesting season (i.e., construction would start between February 1st and August 31st), a qualified biologist shall perform a pre-construction survey to identify active bird nests on or near the site. The pre-construction survey shall take place no more than 7 days prior to the start of construction, and if more than 7 days pass with no construction activities, another pre-construction survey shall be required. The survey shall include all trees and shrubs on the site, all buildings or other structures to be demolished, and all trees and shrubs within a 250-foot radius of the site. If an active, native bird nest is found during the survey, the biologist, shall, in consultation with the CDFW, designate a construction-free buffer zone (typically 500 feet for raptors and 250 feet for other birds, but these distances can usually be reduced in urban areas) around the nest to remain in place until the young have fledged.	*Less than Significant*

Table S-1 Summary of Menlo Park Small High School Project Significant Environmental Impacts and Mitigation Measures			
Environmental Impact	**Potentially Significant Impact?**	**Mitigation Measure**	**Level of Significance After Mitigation**
		Mitigation Measure BIO-1B: Avoid and Minimize Impacts to Roosting Bats A qualified biologist shall visually inspect trees or structures to be removed for bat roosts within 7 days prior to their removal. The biologist will look for signs of bats including sightings of live or dead bats, bat calls or squeaking, the smell of bats, bat droppings, grease stains or urine stains around openings in trees or structures, or flies around such openings. Trees with multiple hollows, crevices, forked branches, woodpecker holes or loose and flaking bark have the highest chance of occupation and shall be inspected the most carefully. If signs of bats are detected, CDFW shall be contacted about how to proceed. Echo-location surveys may be needed to verify the presence of bats, or an exclusion zone around the occupied tree or structure may be recommended until bats leave the roost. Due to restrictions of the California Health Department, direct contact by workers with any bat is not allowed. The qualified bat biologist will be contacted immediately if a bat roost is discovered during project construction.	
		Mitigation Measure BIO-1C: Tree Replacement The District shall replace all trees with a DBH of 15.0 inches or greater that are removed during project construction at a 1:1 ratio. The trees do not need to be replaced in-kind, but should provide similar habitat values as the tree being replaced in terms of structure, food sources, etc. Locally native species such as native oaks (Quercus spp.) shall be used as replacement trees when possible, and invasive species such as eucalyptus (Eucalyptus spp.) shall be avoided. All replacement trees used shall be healthy and sourced from a reputable nursery, and guaranteed to be pathogen free. Replacement trees shall be monitored for a minimum of three years, and dead or unhealthy replacement trees shall be removed and replaced with healthy new trees. If all replacement trees are healthy after three years of monitoring, monitoring may cease.	

Table S-1 Summary of Menlo Park Small High School Project Significant Environmental Impacts and Mitigation Measures			
Environmental Impact	**Potentially Significant Impact?**	**Mitigation Measure**	**Level of Significance After Mitigation**
Cultural Resources			
Impact CUL-1: Project construction could disturb unrecorded historical, archaeological, paleontological, and tribal cultural resources and/or unrecorded human remains.	*Yes*	*Mitigation Measure CUL-1A: Minimize and Avoid Impacts to Unrecorded Cultural and Historic Resources, Tribal Cultural Resources, and Human Remains (Continued)* In the event that unrecorded cultural or historical resources, or tribal cultural resources are accidentally discovered during project construction, the SUSHD shall: • Treat any potential cultural, historical, tribal and paleontological material as a resource to be protected until determined otherwise by a qualified archaeologist or paleontologist. • Ensure that no potential resource is removed or damaged by project personnel. • Stop all earth-disturbing work (e.g., excavation, piling, foundation removal, etc.) within 50 feet of the discovered material, avoid altering the material and its context in any way, and immediately (within 24 hours) have the resource evaluated by a qualified archaeologist or paleontologist before continuing work within 50 feet of the location of the discovered resource • In the event the find is determined to be a historical or unique archaeological resource, a qualified archaeologist shall develop measures, in accordance with Public Resources Code Section 21083.2 and Section 15126.4 of the CEQA Guidelines, which avoid or substantially lessen potentially significant impacts on cultural or tribal cultural resources, with a preference for preservation in place. The SUHSD shall consult with the project archaeologist before continuing work within 50 feet of the location of the discovered resource. If unrecorded human remains are accidently discovered during construction activities, the measures specified in Section 15064.5(e)(1) of the CEQA Guidelines shall be followed:	*Less than Significant*

Table S-1 Summary of Menlo Park Small High School Project Significant Environmental Impacts and Mitigation Measures			
Environmental Impact	**Potentially Significant Impact?**	**Mitigation Measure**	**Level of Significance After Mitigation**
		• There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Santa Clara coroner is contacted to determine that no investigation of the death is required. If the coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall identify the person or persons it believes to be most likely descended from the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98; or, if the NAHC cannot identify the most likely descendants (MLD), the MLD fails to make a recommendation, or the property owner rejects the MLD's recommendations, the property owner can rebury the remains and associated burial goods with appropriate dignity in an area not subject to ground disturbance.	
		Mitigation Measure CUL-1B: Minimize and Avoid Impacts to Paleontological Resources If paleontological resources are encountered, the SUHSD shall avoid altering the resource. All piling activities will cease immediately and, additionally, no work shall be carried out within the stratigraphic context that the resource was discovered in until a qualified paleontologist has evaluated, recorded, and determined appropriate treatment of the resource consistent with protocols of the Society for Vertebrate Paleontology and in consultation with the County.	
		Mitigation Measure CUL-1C: Minimize and Avoid Impacts to all Archaeological, Cultural, Historical, and Paleontological Resources from Piling Activities A qualified archaeologist shall monitor not less the 5% of the total number of augercast piles during the excavation process. The monitoring will consist of a	

Table S-1 Summary of Menlo Park Small High School Project Significant Environmental Impacts and Mitigation Measures			
Environmental Impact	**Potentially Significant Impact?**	**Mitigation Measure**	**Level of Significance After Mitigation**
		representative sample across the entire area affected by piling. The archaeologist will divide the site into areas, and by coordinating with the piling crew and site engineer, will ensure that the first piles from each area are monitored. Additional monitoring of piling activities is at the discretion of the site archaeologist, but will not exceed 10% of the total number of piles if no archaeological, cultural, historical or paleontological resources are discovered during the piling operations.	
Hazards and Hazardous Materials			
Impact HAZ-1: Construction and operation of the Menlo Park Small High School could result in the release or potential release of hazardous materials that pose a risk to human health and/or the environment.	*Yes*	*Mitigation Measure HAZ-1A: Minimize and Avoid Impacts from Unanticipated Hazardous Materials* In accordance with the California Department of Toxic Substances Control's (DTSC) "No Further Action" letter issued for the Menlo Park Small High School Project Preliminary Environmental Assessment, and Education Code 17213.2(e), in the event unanticipated contamination or hazardous materials are discovered during project construction (e.g., gasoline odors, or oily soil or water), the SUHSD shall: • Stop all work immediately, contact the DTSC and, in coordination with the DTSC, take appropriate investigative and/or remedial action to adequately characterize the contamination and ensure the release or potential release of hazardous materials would not pose a significant threat to human health and/or the environment. • Construction may proceed if, after coordinating with the DTSC, it is determined activities would not affect the release or potential release of a hazardous material.	*Less than Significant*
		Mitigation Measure HAZ-1B: Minimize and Avoid Impacts from Lead Paint and Asbestos-Containing Building Materials Prior to the start of any building demolition activity, the SUHSD shall:	

Table S-1 Summary of Menlo Park Small High School Project Significant Environmental Impacts and Mitigation Measures			
Environmental Impact	**Potentially Significant Impact?**	**Mitigation Measure**	**Level of Significance After Mitigation**

		• Hire a qualified inspector(s) to survey the building for potential lead paint and asbestos containing materials.
		  ○ If lead or asbestos are found, the SUHSD shall remove the materials from the building to the extent feasible and in accordance with all applicable regulations, such as Bay Area Air Quality Management District (BAAQMD) Regulation 11, Rule 2, Asbestos Demolition, Renovation, and Manufacturing.
		  ○ If it is not feasible to remove or strip materials out of the building (e.g, asbestos containing concrete), the District shall ensure emissions of lead and /or asbestos are captured and prevented from being released into the outside air by sufficiently wetting the material, providing HEPA exhaust, ventilation, collection of emissions, or other equivalent method.
		  ○ Ensure lead and asbestos containing materials are properly disposed of and transported to an appropriate waste disposal facility
		• Submit a written plan or notification of intent to demolish the structures at 150 Jefferson Drive to the BAAQMD at least 10 working days prior to the start of demolition activities, in accordance with BAAQMD Regulation 11, Rule 2.	

		Mitigation Measure HAZ-1C: Minimize and Avoid Impacts from Equipment Leaks and Spills The District shall minimize and avoid potential leaks and spills from heavy construction equipment used during demolition, site preparation, and building construction activities by: • Designating vehicle and equipment storage, staging, and clean-up locations. • Designating equipment fueling locations and ensuring appropriate spill containment measures and spill response equipment is on-site. Inspecting equipment for leaks prior to and at the conclusion of daily construction activities. If leaks are observed, the leaking equipment shall be repaired	

Table S-1 Summary of Menlo Park Small High School Project Significant Environmental Impacts and Mitigation Measures			
Environmental Impact	**Potentially Significant Impact?**	**Mitigation Measure**	**Level of Significance After Mitigation**
		immediately. All contaminated water, sludge, spill residue, or other hazardous compounds discovered during inspections shall be contained and disposed of, as necessary, at lawfully permitted or authorized disposal sites.	
Impact HAZ-2: The proposed Menlo Park Small High School is located near railroads, pipelines, and other facilities that would pose a less than significant risk to the school.	*No*	*None Required*	*Less than Significant*
Hydrology and Water Quality			
Impact HYD-1: The proposed project is at risk of future inundation from sea level rise.	*Yes*	*Mitigation Measure HYD-1: Raise Final Building Locations above Base Flood Elevations* To reduce potential flooding impacts and inundation from sea level rise, the District shall raise the lowest finish floor elevation of all buildings at least one foot above the existing base flood elevation.	*Less than Significant*
Noise			
Impact NOI-1: Implementation of the Menlo Park Small High School	*No*	*None required.*	*Less than Significant*

Table S-1 Summary of Menlo Park Small High School Project Significant Environmental Impacts and Mitigation Measures			
Environmental Impact	**Potentially Significant Impact?**	**Mitigation Measure**	**Level of Significance After Mitigation**
Project would generate temporary construction-related noise and vibration			
Impact NOI-2: Implementation of the Menlo Park Small High School project could increase ambient noise levels in the vicinity of the project.	*No*	*None required.*	*Less than Significant*
Public Services and Utilities			
Impact PSU-1: The Menlo Park Small High School Project would increase wastewater generation at the site and could result in new or expanded wastewater	*Yes*	*Mitigation Measure PSU-1A: The District shall incorporate water saving devices on all new water using fixtures.* The District shall incorporate water saving features or devices in all new water using fixtures installed at the Menlo Park Small High School. This can include, but is not limited to the use of high efficiency faucet aerators, shower heads, toilets and urinals; automatic faucets; or air cooled or water saving ice machines. *Mitigation Measure PSU-1B: Minimize and Avoid Impacts to the West Bay Sanitation District Sewer System.* The District shall coordinate with the West Bay Sanitary District to determine when	*Less than Significant*

Table S-1 Summary of Menlo Park Small High School Project Significant Environmental Impacts and Mitigation Measures			
Environmental Impact	**Potentially Significant Impact?**	**Mitigation Measure**	**Level of Significance After Mitigation**
facilities.		and what, if any, sanitary sewer system improvements can be implemented to minimize flows to the sewer system to the maximum extent feasible and /or avoid upgrades to existing sanitary sewer facilities at the Menlo Park Small High School site and/or on Jefferson Drive. Options to reduce sanitary sewer flows from the school may include: • Implementing water-saving features as required by Mitigation Measure PSU-1A • Constructing underground holding tanks to hold sewer flows during the day and pump it off-site at night when flow rates are lower • Rerouting or diverting portions of sewer flows to other sewer facilities not currently impacted by inadequate capacity • Other measures determined by the West Bay Sanitary District to minimize and avoid upgrades to sanitary sewer facilities serving the Menlo Park Small High School project	
Cumulative Impacts			
Impact CML-1: Implementation of the Menlo Park Small High School Project would add AM peak hour, school PM peak hour, and daily trips to the	*Yes*	*See Mitigation Measure TRA-1A: Prepare and Implement a Travel Demand Management Program for Menlo Park Small High School Students, Faculty, and Staff* *See Mitigation Measure TRA-1B: Conduct Menlo Park Small High School Travel Mode Survey* *See Mitigation Measure TRA-1C: Evaluate the feasibility of SamTrans bus / shuttle service*	***Significant and Unavoidable***

Table S-1 Summary of Menlo Park Small High School Project Significant Environmental Impacts and Mitigation Measures			
Environmental Impact	**Potentially Significant Impact?**	**Mitigation Measure**	**Level of Significance After Mitigation**
circulation and transportation system in the vicinity of the project under cumulative conditions.			

The inclusion of mitigation measures into the Menlo Park Small High School Project renders 8 of the 10 potentially significant impacts listed in Table S-1 less than significant; however, two traffic-related impacts were found to be unavoidable, significant impacts of the project, even with the application of feasible mitigation measures (Impact TRA-1 and Impact CML-1).

Impact TRA-1 identifies that implementation of the Menlo Park Small High School Project is estimated to result in up to approximately 56 AM peak hour trips and 19 PM peak hour trips to the roadway system during its initial year of operation, when enrollment would be approximately 100 students (anticipated to be the 2018-2019 school year), and up to 322 AM peak hour trips and 174 PM peak hour trips to the roadway system at full enrollment (400 students during the 2021-22 school year). The transportation impact analysis (TIA) prepared for the Menlo Park Small High School Project identifies that the addition of these trips would result in potentially significant impacts to 11 intersections (from unacceptable LOS), four roadway segments (from increased traffic that exceeds roadway capacity), one route of regional significance (from an increase in roadway volume to capacity), and two freeway interchanges (from the addition of traffic to an on-ramp already operating at a substandard level) under existing plus project and near-term plus project conditions (2018 and 2021). Similarly, Impact CML-1 identifies that this level of trip generation would also result in potentially significant impacts to 11 intersections, four roadway segments, one route of regional significance, and two freeway interchanges under cumulative plus project conditions. Mitigation Measures TRA-1A, TRA-1B, and TRA-1C would reduce the amount of vehicle trips generated from implementation of the Menlo Park Small High School Project, but not to a level that would avoid significant impacts to intersections, roadway segments, regional routes of significance or freeway interchanges on an individual or cumulative level. Impacts TRA-1 and CML-1, therefore, are significant and unavoidable impacts that would result from implementation of the Menlo Park Small High School Project.

S.7 ALTERNATIVES TO THE PROPOSED PROJECT

S.7.1 Alternatives Considered and Rejected

The SUHSD considered the construction of a new comprehensive high school campus, but there is no approximately 30-acre parcel or parcels of land available and the acquisition and construction of a new comprehensive high school for approximately 2,000 students is not economically viable. The District also considered redistricting, but found this was not a viable alternative because other schools in the District are currently at or close to capacity and cannot accommodate the increase in enrollment expected to occur at each individual campus plus potential additional enrollment that would be adsorbed by the Menlo Park Small High School. Finally, the District considered a reduced project alternative; however, this alternative was rejected because it would not avoid or substantially lessen the proposed project's significant and unavoidable traffic impacts, nor obtain most of the proposed project's objectives.

S.7.2 No Project Alternative

Under the No Project Alternative, the population growth within the SUHSD boundary that is driving the increase in enrollment at District high schools, and all the elementary and middle schools that feed into the District, would continue to occur; however, the District would not construct and operate the proposed Menlo Park Small High School Project. As a result, the District would be forced to accommodate the 400 students planned to attend the proposed school at other District high schools by either adding portable classrooms or constructing new classroom facilities.

The No Project Alternative would likely avoid or substantially lessen the potentially significant, air quality, biology, cultural resources, hazards, flooding, and public service and utility impacts of the proposed project. This is due to the fact that, under the No Project Alternative, the District may not demolish buildings that contain hazardous materials such as asbestos. In addition, the installation of modular or portable classrooms would be expected to require less overall site preparation, ground disturbance, and building construction activities, reducing construction equipment emissions and potential for equipment leaks and spills.

The No Project Alternative may lessen the significant and unavoidable impacts on intersections, roadway segments, freeway facilities, and regional routes of significance that would occur under the proposed project because increases in student enrollment would likely be distributed throughout each of the District's four comprehensive high schools and other facilities (i.e., potential increases in vehicle trips would be spread through the roadway system). However, local traffic conditions at certain schools, particularly Menlo-Atherton High School, Sequoia High School, and Carlmont High School face existing traffic problems, and the addition of 50, 100, or more students may result in a significant addition of vehicle trips to the local roadway system around these schools. With this in mind, the No Project Alternative would likely result in similar potentially significant vehicle / pedestrian conflicts and indirect environmental effects from a lack of parking as the proposed project. This is because the District's existing comprehensive high school campuses already support thousands of students that have limited parking and little to no ability to expand parking areas due to site constraints.

Presuming the District can add portable classrooms, find space for new classroom buildings, or replace one-story classroom buildings with multi-story structures, the No Project Alternative would not, presumably, satisfy and attain most of the objectives for the Menlo Park Small High School Project. By taking no action, the District would not be supporting preparation and planning for future increases in student enrollment within the SUHSD to fullest extent possible, would not establish a small school site in the southern part of the SUHSD that would alleviate potential overcrowding at Menlo-Atherton High School and Sequoia High School, and would not establish a small high school that uses a CTE / linked learning approach and emphasizes a design, technology, and engineering instruction and curriculum. Thus, the No Project Alternative would not obtain most of the basic objectives of the proposed project.

S.7.3 Different Small High School Site

Under the Different Small High School Site Alternative, the SUHSD would develop a small high school capable of accommodating 400 students and 35 faculty and staff, but in a different location. For the purposes of this EIR, the different high school site would be located at 535 Old County Road, in the City of San Carlos, which the SUHSD currently owns. 535 Old County Road is an approximately 0.8-acre parcel of land currently zoned Neighborhood Mixed Use" by the City of San Carlos. The site is surrounded by developed office, residential, park, and transit-oriented lands, including the Caltrain San Carlos Station.

The Different Small High School Site Alternative would not avoid or substantially lessen most of the proposed project's impacts. The 535 Old County Road site (0.8 acres) is smaller than 150 Jefferson Drive (2.1 acres) and would thus likely require the development of a four-story or higher school to support the same number of students, which could have a substantial adverse change to the visual character and quality of the site (since it is partially surrounded by a residential area and would be visible from sensitive residential areas). The Different Small High School Site Alternative may also result in greater magnitude hazards / hazardous material

impacts because the 535 Old County Road site is closer to rail roads, natural gas pipelines, and airports than the proposed Menlo Park Small High School Site. Finally, the Different Small School High School Site Alternative would be unlikely to avoid or lessen the proposed project's significant and unavoidable traffic impacts, potentially significant traffic impacts, or potentially significant public services and utility impacts. Traffic near Old County Road and Holly Street is congested and intersections are likely operating at unacceptable levels of service. Thus, the addition of vehicle trips to the roadway system surrounding 535 Old County Road is likely to result in significant and unavoidable traffic impacts. In addition, since 535 Old County Road is smaller than 150 Jefferson Drive, the development of a school in this location would likely face greater on-site parking deficits than the proposed project.

The Different Small High School Site Alternative would achieve most of the basic objectives of the project. Developing a small high school at 535 Old County Road would maintain the SUHSD commitment to educational excellence, support preparation and planning for increases in student enrollment, and establish a small high school that uses a CTE / linked learning approach; however, this alternative would not establish a small high site in the southern part of the District. Establishing a small high school site in the southern part of the District is imperative because Menlo-Atherton High School and Sequoia High School are constrained campuses that have little to no ability to expand and /or add capacity. In addition, the development of a small high school in the northern part of the District was not pursued because the San Mateo Union High School District (in conjunction with Oracle) recently opened its Design Tech High School in Burlingame and the success of this school has led plans by Oracle to develop a second design tech school at Oracle's facilities in Redwood Shores. Both of these schools would be open to SUHSD students, which avoids the need to develop a small high school in the northern part of the District.

S.7.4 Environmentally Superior Alternative

The No Project Alternative is the least environmentally damaging alternative because it lessens many of the impacts that would occur with implementation of the Menlo Park Small High School Project; however, it only achieves a few of the objectives for the proposed project. The alternate small high school location would obtain most of the proposed project's objective but, on balance, would not avoid or substantially lessen the proposed project's impacts and is likely to result in higher magnitude impacts than the proposed project. As a result, the proposed project is considered the environmentally superior alternative.

S.8 KNOWN AREAS OF CONTROVERSY

CEQA Guidelines Section 15123(b) requires the EIR Summary to identify areas of controversy known to the Lead Agency, including issues raised by agencies and the public and issues to be resolved including choice among alternatives and whether and how to mitigate the significant effects of the project.

The following issues were most prominent during EIR scoping process:

- The suitability of a school in an industrial / commercial portion of the City of Menlo Park
- Conditions associated with the Menlo Park Small High School operations, such as student loitering and parking in non-designated areas.
- Potential VOC soil and ground water contamination at 150 Jefferson Drive

- Reducing potential traffic and parking impacts
- Concern to potential tribal cultural resources

The environmental analyses in this Draft EIR consider the issues and concerns raised by agencies and the public in its identification of the scope of the EIR and the potential impacts resulting from implementation of the Menlo Park Small High School Project. The Draft EIR identifies that implementation of the Menlo Park Small High School Project would result in two significant and unavoidable, traffic-related impacts; however, by implementing the Menlo Park Small High School Project the District would achieve the objectives of the Menlo Park Small High School Project and maintain access to free, high quality public education mandated by Article IX of the California Constitution. Thus, the District's Board of Trustees needs to decide whether the benefits of the Menlo Park Small High School Project outweigh its significant and unavoidable impacts.

CHAPTER 1 INTRODUCTION

The Sequoia Union High School District (SUHSD or the District) has prepared this Environmental Impact Report (EIR) to evaluate the potentially significant environmental impacts that may result from construction and operation of the District's proposed Menlo Park Small High School Project (the proposed project). This new, three-story high school would serve approximately 400 students in grades 9 through 12 and would be located on approximately 2.1 acres of land at 150 Jefferson Drive, east of the State Route (SR) 84 (Marsh Road) and United States Highway 101 (U.S. 101) interchange, in the City of Menlo Park, San Mateo County. Figure 1-1 shows the regional setting for the District and its proposed project.

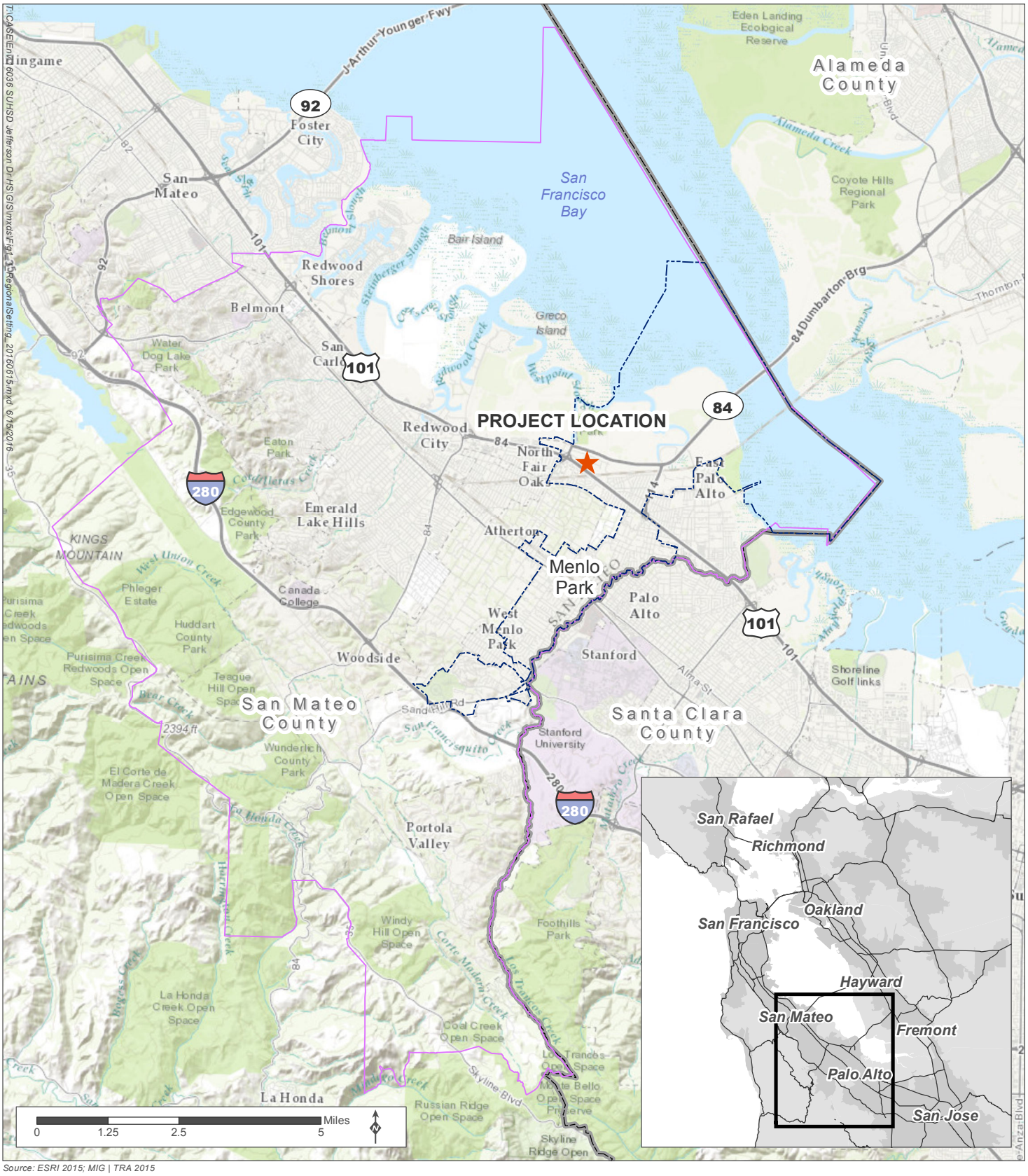
1.1 PROJECT OVERVIEW AND BACKGROUND INFORMATION

The SUHSD is a grade 9 – 12 public school district comprised of four comprehensive high schools (Carlmont High School, Menlo-Atherton High School, Sequoia High School, and Woodside High School), a model continuation high school (Redwood High School), and four charter schools, as well as other specialized programs and services. The SUHSD's non-charter high schools currently serve approximately 9,000 students in total[1]; however, demographic forecasts completed in January 2016 indicate that student enrollment at these schools is likely to increase by several hundred students or more (EPC 2016)[2]. In light of this projected growth, the SUHSD recently added new classrooms and facilities to existing high school campuses and has acquired property for development of a new, small high school in the northern part of the City of Menlo Park in San Mateo County. This location is in the southern portion of the SUHSD, which is anticipated to experience the largest increase in student growth (EPC 2016).

The proposed Menlo Park Small High School project would be located at 150 Jefferson Drive (the proposed school site). This project location consists of a single, approximately 2.1-acre parcel of land that is the current site of an existing warehouse occupied by Bay Associates Wire Technologies. Preliminary investigations of the site performed under the oversight of the California Department of Toxic Substances Control (DTSC) concluded that existing site soil, soil vapor, and groundwater conditions do not pose an unacceptable risk to human health and the environment (DTSC Site ID 204273; Envirostor ID No. 60002163). Nonetheless, the SUHSD would install an impermeable vapor barrier and ventilation system beneath the proposed school classroom building to provide the maximum protection possible for future students. The SUHSD anticipates starting demolition activities in late 2016 and is planning to open the new school in time for the 2018-2019 school year (i.e., August of 2018). The proposed three-story high school would operate on a traditional schedule and would have the capacity to accommodate 400 students and 35 faculty and staff. The San Mateo Community College District (SMCCD) may also use the proposed school classrooms for college-level instruction on limited weeknights and weekends.

[1] Total Enrollment within District run schools (i.e., not including charter schools) for the 2013-14 and 2014-2015 school year was 8,790, and 8,921 students, respectively. Enrollment for the 2015-2016 school year at District run schools is 8,974 students (SUHSD 2016). Enrollment values are based on enrollment as of October of each school year.

[2] The demographic report acknowledges that forecasts may deviate, but there will be increasing overall enrollment within the SUHSD (EPC 2016). Several factors could lead to an under or over-forecast of enrollment levels, particularly at individual schools, such as changes in student resident populations, and intra-district transfers.



Source: ESRI 2015; MIG | TRA 2015

★ Project Location

Sequoia Union High School District Boundary

City of Menlo Park Boundary

County Boundary

Figure 1-1 Regional Setting

1.1.1 SUHSD Acquisition of 150 Jefferson Drive

On December 10, 2014, the SUHSD adopted Resolution Number 1530, confirming the authorization of the District's Superintendent to enter into a Purchase and Sale Agreement to acquire the property at 150 Jefferson Drive. Specifically, the Board recognized that the District must be prepared to address significant future increase in student enrollment, support high quality education, and avoid overcrowding, and that the establishment of new small school sites is an important component in obtaining these objectives (SUHSD 2014). The Purchase and Sale Agreement was executed in February 2015, at which point the SUHSD took ownership of the property at 150 Jefferson Drive.

1.1.2 Bohannon Industrial District Background Information

The proposed project is located in an area of Menlo Park that was developed in the 1960's as part of the 200-acre Bohannon Industrial Park. In general, this area of Menlo Park, which is known as the City's Bayfront Area or M-2 Planning Area, is transitioning from 1960's and 1970's industrial / warehouse land uses to newer, corporate campuses and mixed biotechnology, commercial, office, and other land uses. Brief descriptions of some of the major transformations occurring in this area are provided below.

1.1.2.1 Facebook Campus Project

The Facebook Campus Project includes two project sites inclusive of an East Campus and West Campus (City of Menlo Park 2016a). The Menlo Park City Council approved the East Campus site in May and June of 2012. The 56.9-acre East Campus is located at 1 Hacker Way (previously 1601 Willow Road) and was formerly occupied by Oracle (previously Sun Microsystems). The East Campus is developed with 9 buildings, which contain approximately 1,035,840 square feet. The Menlo Park City Council approved the West Campus site in March and April of 2013. The approximately 22-acre West Campus is located at 1 Facebook Way (previously 312 and 313 Constitution Drive). This second phase of the Facebook Campus Project included the demolition of the existing buildings at the site and the construction of an approximately 433,555 square foot building on top of surface parking. As part of the project approvals, Facebook implemented a vehicular trip cap, which allows approximately 6,600 employees to occupy both campuses. In January 2016, Facebook acquired its 57-acre main campus in Menlo Park in a deal with Sun Microsystems (it was previously leased). The acquisition suggests that Facebook plans on staying in their currently location for some time.

1.1.2.2 Commonwealth Corporate Center Project

The Menlo Park Planning Commission approved the Commonwealth Corporate Center Project in July 2014 (City of Menlo Park 2016b). Located on 13.3 acres of land at 164 Jefferson Drive and 151 Commonwealth Drive, this project involved the demolition of a single-story industrial building and associated structures totaling approximately 237,850 square feet and construction of two four-story office/research and development buildings totaling approximately 259,920 square feet as well as landscaping, a volleyball court, and a basketball court. The project also involved rezoning the site from General Industrial to General Industrial, Conditional Development to accommodate the proposed four-story buildings, which are taller than permitted by the existing site zoning.

1.1.2.3 Menlo Gateway Project

The Menlo Gateway Project involves redevelopment of approximately 15.9 acres of land at two sites located near the Marsh Road / U.S. 101 interchange. The specific sites to be redeveloped include 100 to 190 Independence Drive and 101 to 155 Constitution Drive. The project proposal

was subject to City Council and voter (Measure T) review and approval in 2010. The project requires a general plan and zoning ordinance amendment and other approvals by the City. In general, the project would replace the existing office/warehouse land uses with a mixed-use development that includes a hotel, café / restaurant, health club, serving hotel guests and the public, neighborhood-serving retail and community facilities, three office and research and development buildings, and parking structures (City of Menlo Park 2016c). As of the time of the writing of this EIR, construction activity associated with the Menlo Gateway Project was underway on the Independence Drive site. The new facilities at this site will include an office / research and development building, hotel, health club, and café/restaurant.

1.1.3 City of Menlo Park General Plan Update (ConnectMenlo)

The City of Menlo Park is currently in the process of updating its General Plan Land Use and Circulation Elements, also known as ConnectMenlo. The ConnectMenlo update focuses on the City's M-2 Planning Area and other areas of the City aside from the El Camino Real and Downtown areas. As part of the update, the City is proposing to rezone the proposed Menlo Park Small High School property (150 Jefferson Drive) from industrial to public facility lands (City of Menlo Park 2015, 2016d).

1.1.4 School Site Selection Standards / DTSC Environmental Oversight Agreement

Title V of the California Code of Regulations requires the SUHSD to select a school site that provides safety and supports learning. Title V, together with the California Education Code, establishes standards for school sites and procedures for the SUHSD to follow before acquiring title to property and/or obtaining CDE site review and approval. Pursuant to these standards and procedures, the SUHSD has evaluated the site for air quality, geology, soils, ground water, traffic, and other hazards that may pose a risk to site and school safety. These reports are referenced throughout this EIR as necessary.

On October 29, 2015, the SUHSD and the DTSC Schools Division entered into an Environmental Oversight Agreement related to preparation of a Preliminary Environmental Assessment (PEA) report (DTSC Site Code 204273; Envirostor ID 60002163). The purpose of the PEA was to determine whether a release or potential release of hazardous substances that could pose a threat to human health (via ingestion, skin contact, or inhalation) or the environment could occur as a result of project construction and long-term operation. As described in more detail in Chapter 8, Hazards and Hazardous Materials, the PEA prepared for the Menlo Park Small High School Project determined the presence of chemicals such as lead and VOCs in site soils, soil vapor, and groundwater do not pose a risk to human health and the environment and, therefore do not require further investigation or remedial action. On June 13, 2016, the DTSC approved the PEA and found no further investigation or remediation of the site is required.

1.2 CEQA LEAD AGENCY INFORMATION

The California Environmental Quality Act (CEQA) establishes the SUHSD as the Lead Agency for the project. The Lead Agency is defined in CEQA Guidelines section 15367 as "the public agency which has the principal responsibility for carrying out or approving a project." Under CEQA, the Lead Agency is responsible for preparing the appropriate environmental review documentation. The SUHSD has determined an EIR is the appropriate CEQA document for the proposed project and has prepared this Draft EIR in accordance with the provisions of the CEQA (PRC §21000 et seq.) and the CEQA Guidelines (14 CCR §15000 et seq.). The District is both the proponent and CEQA Lead Agency for the Menlo Park Small High School Project. The

District's Board of Trustees serves as the decision making body for the SUHSD and is responsible for approving the Menlo Park Small High School Project.

1.3 INTENDED USES OF THIS EIR

This EIR is intended to evaluate the potential direct and indirect physical, environmental effects associated with implementation of the District's Menlo Park Small High School Project, which is described in detail in Chapter 2, Project Description. An EIR is an objective, informational document that informs decision makers and the public of the potential for significant project effects, including possible ways to minimize those effects, and describes reasonable alternatives to the project (CEQA Guidelines §15121(a)). An EIR must be prepared with a sufficient degree of analysis to provide decision makers with information enabling them to make a decision that intelligently considers the project's potential direct and indirect environmental consequences. The evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible (CEQA Guidelines §15151).

1.3.1 Responsible, Trustee, and Interested Agencies

The information contained in this EIR will be used for all project-related discretionary approvals subject to environmental review, including potential approvals by responsible, trustee, and other agencies.

CEQA Guidelines section 15381 defines a responsible agency as "a public agency which proposes to carry out or approve a project for which a Lead Agency has prepared an EIR." Responsible Agencies for the proposed Menlo Park Small High School Project may include the City of Menlo Park, the Bay Area Air Quality Management District (BAAQMD), and California Department of Fish and Wildlife (CDFW).

CEQA Guidelines section 15386 defines a trustee agency as "a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California." Trustee agencies with jurisdiction over the resources potentially affected by the proposed Menlo Park Small High School Project include CDFW.

CEQA Guidelines section 15379 excludes federal government agencies from the definition of a "public agency." Thus, the U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers are not responsible or trustee agencies for the purposes of CEQA, but rather interested agencies concerned with the project and its potential effects on jurisdictional resources.

A complete list of the permits and approvals the project may require is provided in section 2.6.

1.4 EIR SCOPING INFORMATION

1.4.1 Notice of Preparation of an EIR

The SUHSD prepared and filed a Notice of Preparation (NOP) of an EIR with the State Clearinghouse (SCH) and San Mateo County Clerk-Recorder on February 19, 2016 (SCH# 2016022066). The NOP is included in Appendix A to this EIR. The SUHSD distributed the NOP to potential local responsible agencies and other interested organizations, as well as owners and occupants of properties within 500 feet of 150 Jefferson Drive. The NOP was also made available electronically via a weblink on the SUHSD's website (www.seq.org). The SUHSD provided a 35-day public review period for the NOP from February 19, 2016 to March 25, 2016. Written comments on the NOP were received from the California Department of Transportation (Caltrans), the Native American Heritage Commission (NAHC), the West Bay Sanitation

District, and three interested businesses / property owners located near the proposed school site. These written comments are summarized in Section 3.2 and are included in Appendix A to this EIR.

1.4.2 EIR Scope and Content

In accordance with CEQA Guidelines Section 15126, this EIR identifies and focuses on the potentially significant environmental effects of the proposed project, as determined based on the project as described in this EIR and written comments received during the public review period for the NOP (February 19, 2016 to March 25, 2016). Accordingly, this EIR focuses on one or more significant impacts to the following resource areas identified in Appendix G to the State CEQA Guidelines: Transportation, Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, and Public Services and Utilities. Section 3.3 provides more information on the project's impacts found not to be significant.

1.5 REFERENCES

City of Menlo Park 2015. "M-2 Area Potential Zoning and Street Classifications." Menlo Park, Ca. November 2015.

_____2016a. "Facebook Campus Project." City of Menlo Park, Government, City Departments, Community Development, Projects, Approved Projects. *Facebook Campus Project.* n.d. Web. April 28, 2016. <http://www.menlopark.org/643/Facebook-Campus-Project>

_____2016b. "Commonwealth Corporate Center Project." City of Menlo Park, Government, City Departments, Community Development, Projects, Approved Projects. *Commonwealth Center Project*. n.d. Web. April 28, 2016. <http://www.menlopark.org/519/Commonwealth-Corporate-Center-Project>

_____2016c. "Menlo Gateway Project." City of Menlo Park, Government, City Departments, Community Development, Projects, Approved Projects. *Menlo Gateway Project*. n.d. Web. April 28, 2016. <http://www.menlopark.org/651/Menlo-Gateway-Project>

_____2016d. *ConnectMenlo: General Plan Land Use and Circulation Elements and M-2 Area Zoning Update Public Review Draft Environmental Impact Report (SCH #2015062054.* Prepared for the City of Menlo Park by Placeworks. June 1, 2016.

Enrollment Project Consultants (EPC) 2016. *Projected Enrollments from 2015 to 2020 and in 2023 Sequoia Union High School District.* San Mateo, CA. January 13, 2016.

Sequoia Union High School District (SUHSD) 2014. *Resolution Confirming Authority to Execute Purchase and Sale Agreement for Property Located at 150 Jefferson Drive, Menlo Park, California; Authorizing the Completion of Transaction to Purchase the Property; and Authorizing the Superintendent or His Designee to Take All Appropriate Actions to Complete the Transaction (Resolution Number 1530).* Adopted December 10, 2014.

_____2016. *Enrollment 2012-2016*. Redwood City, Ca. July 2016.

CHAPTER 2 PROJECT DESCRIPTION

The SUHSD's proposed Menlo Park Small High School Project is needed to support high quality education, to accommodate increases in student enrollment, and to avoid overcrowding at existing District schools. In general, this SUHSD project would involve:

- SUHSD demolition of the existing facilities at 150 Jefferson Drive;
- SUHSD construction and operation of a new, approximately 45,000 gross square-foot, three-story, small high school capable of serving 400 high school students and 35 faculty and staff;
- A potential partnership with the San Mateo County Community College District (SMCCCD) to allow use of the SUHSD facilities for SMCCCD college instruction

The SUHSD anticipates beginning site demolition in late 2016 and plans to open the new school in time for the 2018-2019 school year (i.e., by August 2018).

2.1 PROJECT LOCATION AND SITE DESCRIPTION

The SUHSD's proposed Menlo Park Small High School Project would be located at 150 Jefferson Drive (the proposed school site), east of the SR 84 and U.S. 101 interchange, in the northwestern portion of the City of Menlo Park, San Mateo County.

Figure 2-1 shows the proposed school site and vicinity, which is centered on 37°28'56" north latitude and 122°10'26" west longitude. The site is located approximately 0.2 miles north of the U.S. 101 and Dumbarton Rail Corridor, and approximately 0.2 and 0.3 miles south and east of SR 84, respectively (Bayfront Expressway and Marsh Road, respectively). The City of Menlo Park's Suburban Park / Lorelei Manor/ Flood Park neighborhood is approximately 0.2 miles south of the site (across U.S. 101) and the City's Belle Haven neighborhood is approximately 0.4 miles southeast of the site (across the Dumbarton rail corridor; see Figure 2-1).

The proposed small high school site lies within an area of Menlo Park that is transitioning from 1960's and 1970's industrial / warehouse land uses to newer, corporate campuses and mixed biotechnology, commercial, office, and other land uses (see section 1.1). As described in more detail below, 150 Jefferson Drive is surrounded by commercial and warehouse properties on Constitution Drive (north of the site), Independence Drive and Chrysler Drive (west of the site), and Commonwealth Drive (south of the site; see Figure 2-2).

2.1.1 Menlo Park Small High School Site Description

The proposed school site (150 Jefferson Drive) consists of a single, developed land parcel (Assessor's Parcel Number [APN] 055-243-030) which is approximately 2.1 acres in size (see Figure 2-2). As described in section 1.1.1, the District entered into a Purchase and Sale Agreement with the former property owner in December 2014 and took ownership of this site in February 2015.

Source: Esri, 2016; Cornerstone, 2015; MIG|TRA, 2016

Proposed Small High School Site
City of Menlo Park Bayfront / M2 Planning Area
City Boundary
Rail Line

Figure 2-1 Proposed Project Location

Source: ESRI, 2016; MIG|TRA, 2016

Proposed Small High School Site
City Boundary
Rail Line

Figure 2-2 Proposed School Site and Surrounding Businesses / Land Uses

150 Jefferson Drive is currently zoned by the City of Menlo Park as General Industrial District (M-2). The City's General Plan designates the property as Limited Industry. Historically, the site was undeveloped until about 1960. By 1963, the Bohannon Industrial Park was under development, and construction of the existing facilities at 150 Jefferson Drive was complete. From 1963, to 1980, the site housed hospital supply and business support operations. Bay Associates Wire Technologies, Incorporated, a business specializing in custom cable and cable assembly solutions, has occupied the site since about 1980 (Cornerstone 2014a).

The existing facilities at the site include an approximately 44,000 square-foot office / warehouse building with associated parking and landscaping. The one-story office / warehouse building faces north and fronts Jefferson Drive. The east, south, and west sides of the building are paved; truck loading bays and 33 employee and visitor parking spaces are provided on the eastern side of the building. A portion of the existing building at the site is raised approximately four feet to accommodate the truck-loading bays along the eastern portion of the facility (Cornerstone 2014b). The north side of the site is characterized by light vegetation, including a planted area that is punctuated by a paved-concrete path from the sidewalk to the main entrance; landscaping along the property frontage consists of maple trees, other ornamental trees, ornamental shrubs, and herbaceous vegetation. The east side of the site is lined with a manicured hedge that ends at the south side of the site, where the blacktop meets a strip of un-manicured dirt track with some unplanted, but manicured vegetation. The western border is lined with eucalyptus trees, ornamental shrubs and English Ivy.

The proposed school site, which is approximately 325 east of the intersection of Jefferson Drive and Chrysler Drive, is located in a part of the City of Menlo Park where nearly all parcels are zoned General Industrial District (M-2) or Commercial Business Park (M-3) and designated by the City's General Plan for Limited Industry or Commercial Business Park use. As shown on Figure 2-2, businesses located adjacent to, or across the street from, the proposed school site include:

- ***InfoImage****:* InfoImage, located at 141 Jefferson Drive (across the street from the proposed school site), provides services involving the processing, printing, and online presentation of financial, transactional and other variable-data documents.
- ***Exponent Engineering, P.C.:*** Exponent Engineering, P.C. is an engineering and scientific consulting firm specializing in the investigation of accident incidents and failure analyses of various consumer goods and/or materials. The building at 149 Commonwealth Drive (behind the proposed school site) consists mainly of office space with several individual laboratory rooms at the rear of the building. The building at 160 Jefferson Drive (located to the east of the proposed school site) is used mainly for storage purposes. Chemical use at 149 Commonwealth Drive includes mostly small quantities of inert gases, petroleum-based products, polyester resins, various lab chemicals, lead-acid batteries, propane, and methane. A diesel above-ground storage tank (300 gallons) for a stationary emergency generator is also located at the rear of the property.
- ***Corcept Therapeutics Inc.:*** Corcept Therapeutics Inc., also located at 149 Commonwealth Drive (behind the proposed school site) was initially founded in May 1998, and focuses on researching the impact of cortisol and the potential benefits of developing glucocorticoid receptor antagonists.
- ***Goodwin Procter LLP:*** Goodwin Procter LLP is a leading AM Law 50 and Global 50 law firm located at 135 Commonwealth Drive (the building to the southwest of the proposed school site), with offices across the United States and in Europe and Asia. The

firm advises multinational companies on public/private enterprises and helps emerging companies grow. The office in Silicon Valley opened in June 2007 and is now home to over 60 attorneys. The attorneys provide both business law and litigation services.

- ***L-3 Randtron Antenna Systems:*** Randtron Antenna Systems is a producer of Department of Defense antennas. The facilities located at 138 Jefferson Drive and 1150 Chrysler Drive (both of which are located to the west of the proposed school site) total approximately 120,000 square feet.

Other notable projects in the area include the Commonwealth Corporate Center Project, the Menlo Gateway Project, and the Facebook Campus Project. A description of these projects is presented in section 1.1.2. Visual depictions of the Menlo Gateway and Commonwealth Corporate Center projects are provided in Figure 2-3.

Figure 2-3 Menlo Gateway and Commonwealth Corporate Center Projects

Menlo Gateway Project Site Plan (Source: Menlo Gateway 2016)

Commonwealth Corporate Center Project (Source: City of Menlo Park 2014)

2.1.2 Existing Access

Vehicular and pedestrian access to the proposed school site and vicinity is limited due to barriers such as the SR 84 to the north (Bayfront Expressway) and west (Marsh Road), the Dumbarton Rail Corridor to southeast, and U.S. 101 to the south / southwest. Accordingly, access to the project area and vicinity occurs via Chilco Street (if coming from the southeast) or Marsh Road to Independence Drive (if coming from the southwest). Two existing driveways provide on-site access. An approximately five-foot-wide sidewalk is present only on the southbound side of Jefferson Drive adjacent to the proposed school site.

2.1.3 Existing Elevation and Topography

The proposed school site is generally flat. Site surface elevations are approximately six feet above mean sea level (amsl), with the property gradually increasing to approximately 7 feet amsl on the southern portion of the site (Dains Land Surveying 2016). 150 Jefferson Drive is not located within a Federal Emergency Management Agency (FEMA)-defined Special Flood Hazard Area (FEMA 2012); however, the SUHSD is proposing to raise the building pads at least one-foot above the estimated base flood elevations of 7.25 feet amsl (see Chapter 9, Hydrology and Water Quality).

2.1.4 Existing Site Soil, Soil Vapor, and Groundwater Conditions

Soil and groundwater investigations at 150 Jefferson Drive identified several chemicals of concern associated with both natural sources and historical land uses (Cornerstone 2015). The SUHSD coordinated with the DTSC to further delineate and characterize the extent of existing soil contamination through a Preliminary Environmental Assessment (PEA) for the proposed school site. As described in more detail in Chapter 8, Hazards and Hazardous Materials, the SUHSD subsequently investigated the site for the potential presence of lead (from lead paints), organochlorine pesticides (OCPs), polychlorinated biphenyls (PCBs, from the electrical transformer), and VOCs and fixed gases (carbon dioxide, methane, and oxygen) for vapor intrusion potential from the site's current use and from the regional solvent plume. The PEA prepared under the oversight of the DTSC concluded the present of potential chemicals of concern at the site do not pose a risk to human health and the environment (Cornerstone 2016). On June 13, 2016, the DTSC approved the PEA and found no further investigation or remediation of the site is required. Although the DTSC as determined "No Further Action" is necessary for the site, the SUHSD is voluntarily incorporating an impermeable vapor barrier and ventilation system beneath the proposed school classroom building to provide the maximum protection possible for future students, faculty, and staff.

2.1.5 Existing Utilities

The proposed school site contains existing electricity, natural gas, water, sewer, and telecommunication lines associated with the site's historical and existing office / warehouse development, as well as several public utility easements, including:

- An approximately 350-foot-long by 10-foot-wide sanitary sewer easement located along the southern property line
- An approximately 350-foot-long by 25-foot-wide railroad easement located along the southern property line

Overhead electrical lines run along the south side of Jefferson Drive, in the front of the proposed school site. An existing transformer located on the east side of the site steps down power for site use. Natural gas and water mains that run under Jefferson Drive serve the site; lateral pipelines

transfer natural gas and water from these mains onto the property. Existing, 8-inch-wide sanitary sewer mains run along the northern and southern sides of the property. The West Bay Sanitation District has indicated these lines may require upgrading to support the project (West Bay Sanitation District 2016).

The railroad easement located on site is owned by the Union Pacific Railroad. The District has coordinated with the railroad regarding the easement and is not proposing to place any structures within the easement (LPA 2016a).

2.2 PROJECT COMPONENTS

The SUHSD is proposing to construct and operate a small high school facility with capacity to accommodate up to approximately 400 high school students and 35 faculty and staff. The proposed project would support high quality education and avoid overcrowding at SUHSD schools, particularly in the southern part of the District. The SUHSD would open the new school in time for the 2018-2019 school year.

The proposed project would involve the following components: removal of existing site facilities and construction of a new high school, operation of the new high school, and a potential partnership with the SMCCCD. These components are described below. A detailed description of the proposed school facilities and site features is provided in Section 2.3.

2.2.1 Project Construction

Project construction is anticipated to begin in early 2017 and last approximately 18 months. Table 2-1 lists the anticipated construction phases, duration, and the typical equipment used during construction of the project. Construction staging would occur on-site; construction workers would park on-site or along Jefferson Drive.

Table 2-1 Summary of Project Construction Phases, Duration, and Equipment

Construction Activity (2016 – 2018)	Days[(A)]	Typical Equipment[(B)]
1. Demolition and Site Preparation	25	Dozer, backhoe, tiller
2. Grading	20	Excavator, grader, scraper
3. Foundation (Piles)	30	Auger rig
4. Building Construction	210	Crane, forklift, backhoe, welders
5. Paving	20	Paver, roller
6. Architectural Coating	20	Air compressor, material lifts

(A) "Days" refers to total work days

(B) The typical equipment list does not reflect all equipment that would be used during the construction phase.

Project construction would begin with the demolition and deconstruction of the existing, approximately 44,000 square foot office / warehouse building and site improvements. The SUHSD would remove existing concrete and asphalt surfaces, landscaping, subsurface pipelines, etc. and rough grade the site pursuant to the final site design and permissible construction practices (i.e., some concrete slabs may be crushed and left in place and some smaller utility lines less than four inches in diameter may be abandoned in place). Geotechnical investigations of the site indicate that artificial fill materials present are suitable for reuse in backfilling and other site construction purposes. Excavation for structural components of the proposed school and potential utility connections are anticipated to encounter groundwater and thus require

dewatering of the site. The SUHSD would test groundwater prior to discharge off-site and comply with all applicable regulations regarding construction dewatering (see Chapter 9, Hydrology and Water Quality).

The potential for liquefaction and settlement at the proposed school site requires either a concrete mat foundation or a deep foundation system consisting of augercast piles and pile caps. The SUHSD is proceeding with a deep foundation system that would consist of 35 gravity support columns and 20 brace frames. This system would require the SUHSD to install a total of 185, 16-inch diameter piles to a depth of 55 feet below ground surface. The SUHSD is proposing the use of augercast pressure grouted piles, which displace the soil column as the drill stem and auger head is advanced, prior to pumping concrete. Although this activity primarily displaces soils, some spoils would be generated and carried to the surface for reuse or appropriate disposal. Following completion of the piles, the SUHSD would proceed with trenching for utilities, ground floor slab pouring (approximately five inches thick), building structural components and framing, and final building construction. Site finishing would include approximately one acre of concrete and asphalt paving plus landscaping.

The proposed finish floor elevation is approximately 8.5 feet amsl, which is above the base flood elevation at the site of approximately 7.5 feet amsl. As such, substantial soil hauling is not expected for the project. The SUHSD estimates approximately 3,400 cubic yards of cut, with 1,200 cubic yards balanced on site. Thus, the project is anticipated to result in a net export (i.e., off-haul) of approximately 2,200 cubic yards of soil, plus building demolition materials (equal to approximately 4,000 cubic yards).

2.2.2 On- and Off-Site Utility Improvements

The SUHSD, in coordination with utility service providers, would relocate, replace, and/or extend existing utilities and utility infrastructure to support the proposed school site. In general, most utility lines would be buried under paved areas around the perimeter of the proposed school. The SUHSD would continue to provide any public service utility easement located on the school site (see section 2.1.5).

2.2.3 School Operation

The proposed high school would operate on a traditional schedule. From approximately August or early September through June, classes would be in session from about 8:15 or 8:30 AM to 3:30 or 3:45 PM. Faculty and staff would arrive prior to the start of classroom instruction, and some after school and evening programs (clubs, parent meetings, etc.) would also occur at the school. Thus, the SUHSD anticipates the site would typically be in use by school faculty, students, and staff from approximately 7 AM to 6 PM Monday through Friday. Summer school classes would be offered in June and July; evening and weekend events may also occur at the campus intermittently through the year (e.g., Back to School Night, graduation ceremonies).

The approximately 45,000 square-foot high school would be open to all SUHSD students; however, the SUHSD anticipates that the proposed Menlo Park Small High School would primarily serve students from the southern part of the SUHSD (i.e., Redwood City, Menlo Park, and East Palo Alto). This is because similar academic programs and curricula are available at other schools in the north part of the District, which would be closer to students living in the northern part of the District (e.g., Belmont, San Carlos, Redwood Shores).

The proposed high school would open with an initial incoming freshman class only. Thus enrollment during the 2018-2019 school year is estimated to be approximately 100 students. The

SUHSD expects the school would reach full capacity (approximately 400 students) by the 2021-22 school year (i.e., when the inaugural freshman class of 2018 are seniors).

Due to the size of the proposed school site, school- and site-specific athletic facilities are not proposed. Rather, student athletes participating in basketball, soccer, etc. would use other existing SUHSD facilities, such as the gym at the Stanford Charter School (Myrtle Street in East Palo Alto). In addition, if necessary, the SUHSD would coordinate with local entities to allow student use of other nearby sports fields, courts, and facilities, such as Flood Park (215 Bay Road in Menlo Park), the Synergy Badminton Academy (190 Constitution Drive in Menlo Park), and the Onetta Harris Community Center (100 Terminal Avenue in Menlo Park). The SUHSD notes that the proposed school is unlikely to field one or more athletic teams until several years after the school has opened.

2.2.4 Potential SMCCCD Partnership

As part of the project, the SUHSD may enter into a partnership with the SMCCCD with the goal to round out the offering of content specific high school courses, which would provide students with the practical and theoretical knowledge to apply to work-based learning environments. The SMCCCD may also use the high school to provide community college courses several nights a week or on weekends.

2.3 PROPOSED SMALL HIGH SCHOOL DESCRIPTION AND SITE FEATURES

The proposed high school would include state-of-the-art educational programming and facilities for Grade 9 through 12 curricula. The proposed site layout and facilities are described below; Figure 2-4 to Figure 2-6 depict the proposed site plan and provide perspective views for the proposed Menlo Park Small High School Project (LPA 2016b, 2016c).

2.3.1 Proposed Layout and Facilities

The SUHSD has designed the proposed Menlo Park Small High School to reflect an innovative and collaborative spirit. The proposed site layout is organized around the east-west axis to maximize exposure to daylight, as well as views to the bay. The articulated, three-story school building would be approximately 45,000 square feet in size and approximately 50 feet tall on the western and southern sides (i.e., reaching approximately 58.5 feet amsl) and 30 feet tall on its eastern side (i.e., reaching approximately 38.5 feet amsl).

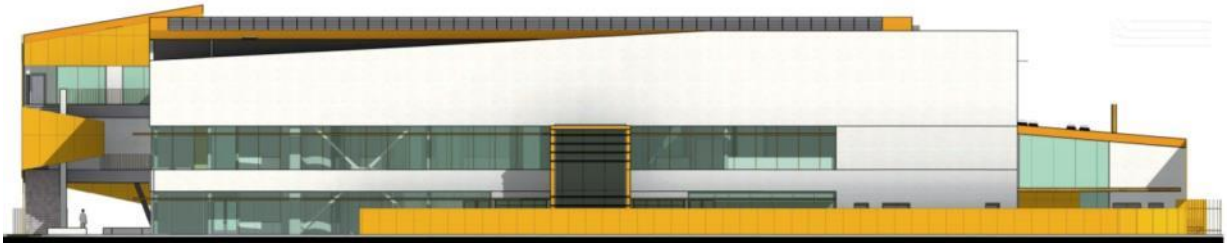
The proposed "U"-shaped building configuration would wrap around and allow direct access to an amphitheater-like campus courtyard that would be the signature characteristic and central focus point of the campus. This courtyard would be used for assemblies, demonstrations, school fundraising and social functions. The central courtyard would also provide a primary circulation between floors for students and staff. Emphasizing the principle that an outward focused campus invites community, business, and institutional partnerships to support technology-driven education, the schematic design for the school includes a central, three-dimensional courtyard space and a glazed north facade that fronts Jefferson Drive and makes visible the daily activities of the innovative educational process. The main entrance to the high school would be on the interior, southern side of the site; the main entrance would face south, away from Jefferson Drive.

Figure 2-4 Menlo Park Small High School - Proposed Site Layout

Figure 2-5 Menlo Park Small High School – Sectional View

Figure 2-6 Menlo Park Small High School - Conceptual Perspective Views

View 1: Northern view of proposed school site (i.e., looking south from Jefferson Drive).



View 2: Southern view of proposed school site (i.e., looking north from businesses on Commonwealth Drive.

View 3: Eastern view of proposed school site (i.e., looking west from 160 Jefferson Drive).

View 4: Eastern view of proposed school site (i.e., looking east from 138 Jefferson Drive).

Classroom, support, and administrative facilities would be located on the first and second floors of the school. Most classrooms would be oriented toward the courtyard and would be visible though a glass wall. The third story would be home to the dining area and associated dining deck. Tentatively, the school would include eight general classrooms, three science classrooms, two design classrooms, one maker space, a research lounge, a performing arts classroom, a student union with associated food service, administrative offices, and support spaces. Due to the project's location near Facebook and other technology company campuses (as well as the outcome of parent and student surveys), the SUHSD anticipates educational programming would include career technical education (CTE) classes, linked learning, and academic content focused on design, technology, and engineering curricula that prepares students for pursuing both college enrollment and professional careers.

2.3.2 Circulation and Parking

Due to existing barriers (see section 2.1.2), local access to 150 Jefferson Drive site would occur via Chilco Street, Independence Drive, Constitution Drive, and Chrysler Drive. Once on Jefferson Drive, the SUHSD is proposing a one-way circulation pattern for site access. Vehicles and pedestrians would use a main driveway on the eastern side of the property to enter the school site, travel a perimeter road to the back of the school, where the main entrance would be located, and then proceed to exit the site via a driveway on the western portion of the property. The SUHSD would provide a 220-foot long, 10-foot-wide student loading and unloading lane in front of the school's main entrance. The SUHSD would also install tubular steel gated entries at both the east and west driveways to control vehicular access into and out of the site when school is not in session.

The schematic design plans show 50 parking stalls lining the southern and western portions of the property (including two Americans with Disabilities Act accessible stalls). The SUHSD would provide a minimum of 20 racked bicycle parking spaces and 3 bicycle lockers.

The SUHSD would install a 12-foot-high vinyl coated chain link fence with windscreen fabric along the eastern, southern, and western perimeter of the property to provide security, privacy, and control pedestrian access to the site; a custom steel picket fence would be installed on the northern side of the property that fronts Jefferson Drive.

2.3.2.1 Fire Access

The SUHSD has met with the City of Menlo Park Fire Marshall and has designed the project to comply with the 2013 California Fire Code. The SUHSD has provided fire and emergency access to the interior and back site via a paved, 26-foot-wide drive aisle located around the perimeter of the site that includes a 44-foot radius turn and a ladder truck staging area to reach building areas more than 30 feet above the ground. The schematic design also calls for upgrading one fire hydrant on Jefferson Drive and the installation of two new fire hydrants on-site. The SUHSD would continue to coordinate with the City of Menlo Park Fire Department on fire access and emergency response issues.

2.3.3 Storm Water Controls

The proposed school site would reduce the amount of impervious surfaces at 150 Jefferson Drive by approximately eight percent and thus reduce storm water run-off volume and peak flow rates as compared to existing conditions (LPA 2016c). Nonetheless, the SUHSD is including site design, source control, and treatment control measures into the project consistent with the San Mateo Countywide Water Pollution Program (SMCWPP). Site design measures include directing runoff from the building roof and parking lot to vegetated areas, minimizing impervious area,

and planting trees. Source control measures include stenciling drain inlets with "No Dumping! Flows to Bay", installation of refuse areas, use of food service drains to trap grease, and landscaping design to minimize water use, pesticides, and runoff (LPA 2016d). Treatment control measures include bioretention areas and flow-through planters. All roof and parking lot runoff would be treated on-site before being discharged to the adjacent public storm water system in Jefferson Drive. This filtration system would consist of an 18-inch layer of bio-treatment soil, a 12-inch layer of permeable rock, and a 6-inch sub-drain system that connects to the municipal storm drain system. In addition to approximately 2,850 square feet of bio-filtration areas (equal to approximately 3.1 percent of the lot area), the school may feature a green roof that would consist of pre-planted roof trays with engineered growing media, filter fabric, and roofing protection / waterproofing systems.

2.3.4 Landscaping

The SUHSD would provide landscaping at the site in the form of lawns, shrubs, and trees. The preliminary planting plan prepared for the project calls for the use of drought-tolerant plants and various-sized trees. Although the SUHSD is not subject to the City's heritage tree ordinance (see section 6.2.7), the preliminary planting plan is consistent with City's tree replacement guidelines (LPA 2016e). All commercial applicants are required to replace lost heritage trees on a 2:1 basis. A suitable replacement tree is a #15 container that at maturity will reach a minimum of 40' high. The preliminary planting plan calls for seventy (70) trees 24-inch box or larger onsite, including fifteen 36-inch box and 3 48" box trees. This planting plan provides a 4:1 replacement ratio for lost trees.

2.4 PROPOSED PROJECT SCHEDULE

The SUHSD is proposing to have the new Menlo Park Small High School in service by August 2018. Construction of the project would occur over an approximately 18-month period beginning in late 2016. The inaugural freshman class would consist of approximately 100 students supported by approximately 15 faculty and staff. Each subsequent year the school would grow in size by approximately 100 students. By the 2021-22 school year (i.e., when the inaugural freshman class are seniors), the school would reach its capacity of approximately 400 students, supported by 35 faculty and staff.

2.5 PROJECT OBJECTIVES

The SUHSD's objectives for the proposed Menlo Park Small High School Project are:

- To maintain the SUHSD's commitment to education excellence and to continue a strong and varied curriculum that prepares students to graduate and be successful in college and professional careers.
- To support preparation and planning for expected future increase in student enrollment within the SUHSD.
- To establish a new small school site in the southern part of the SUHSD that helps alleviate potential overcrowding at Menlo-Atherton High School and Sequoia High School.
- To establish a new small high school that uses a career technical education / linked learning approach and emphasizes a design, technology, and engineering instruction and curriculum.

2.6 PERMITS AND APPROVALS REQUIRED BY THE PROJECT

The SUHSD is the proponent and CEQA Lead Agency for this project. The City of Menlo Park, and the DTSC may be responsible agencies for the project. A list of the potential permits and approvals that the project could be subject to is provided in Table 2-2.

Table 2-2 Potential Project Permits and Approvals

Agency	Review, Authorization, or Approval
California Department of General Services, Division of State Architect (DSA)	The DSA reviews the design and construction or alteration or reconstruction of school buildings to ensure plans and specifications comply with the structural safety requirements of the Field Act (California Education Code Section 17280 et. seq), fire/life safety, and accessibility requirements, and Title 24 of the California Code of Regulations.
City of Menlo Park	Potential Encroachment Permit
DTSC	Site Review and approval for school use / "No Further Action" Determination
RWQCB	Notice of Intention to comply with General Storm Water Permit for construction disturbing more than one acre

2.7 REFERENCES

Cornerstone Earth Group (Cornerstone) 2014a. *Phase I Environmental Assessment 150 Jefferson Drive, Menlo Park, California*. Prepared by Cornerstone for the Sequoia Union High School District. November 2014.

_____2014b. *Preliminary Geotechnical Investigation 150 Jefferson Drive, Menlo Park, California.* Prepared by Cornerstone for the Sequoia Union High School District. December 2014.

_____2016. *Draft Preliminary Environmental Assessment Report, Menlo Park Small High School Project, 150 Jefferson Drive, Menlo Park, California (Site Code 204273).* Prepared by Cornerstone for the Sequoia Union High School District. March 2016.

City of Menlo Park. 2010. *Menlo Gateway Project: Draft Environmental Report*. SCH # 2005062161. July 2009.

_____2014. *Commonwealth Corporate Center*. PowerPoint presentation to the City of Menlo Park Planning Commission. March 24, 2014.

Dains Land Surveying 2016. *Topographic Survey Plan 150 Jefferson Drive A.P.N. 055-243-030, Lots 6, 7, and 8, Maps 5, Menlo Park, San Mateo County, California.* March 22, 2016.

Federal Emergency Management Agency (FEMA) 2009. *Flood Insurance Rate Map San Mateo County, California and Incorporated Areas, Panel 306 of 510.* Map Number 06081C0306E. October 16, 2012.

LPA, Inc. (LPA). 2016a. "Menlo Park Small HS – easement" Email communication from Katia McClain, Associate/Managing Director, LPA, to Louise Pacheco and Matthew Zito, SUHSD. May 5, 2016.

_____2016b. *Menlo Park Small High School 100% Schematic Design Drawings.* Prepared by LPA for the Sequoia Union High School District. April 5, 2016.

_____2016c. *Basis of Design Menlo Park Small High School, 150 Jefferson Drive, Menlo Park, CA 94025.* Prepared by LPA for the Sequoia Union High School District. April 5, 2016.

_____2016d. *Stormwater Discussion.* Prepared by LPA for the Sequoia Union High School District. April 27, 2016.

_____2016e. "Narrative on MPSHS Trees – for CEQA Document". Email communication from Katia McClain, Associate/Managing Director, LPA, to Chris Dugan, MIG. June 23, 2016.

Menlo Gateway 2016. *Menlo Gateway Brochure*. n.p. 2016. <http://www.menlogateway.com/#home-intro>

This page intentionally left blank

.

CHAPTER 3 IMPACT ANALYSIS METHODOLOGY

This chapter describes the analytical methodology used and EIR scoping information considered in the preparation of the environmental analyses contained in Chapter 4 – 12 of this EIR. This chapter also partially addresses project effects found not to be significant.

3.1 ANALYTICAL METHODOLOGY

In evaluating the proposed project's potential impacts, the SUHSD employed the analytical methodology described below.

Step 1: Identification of Existing Physical Conditions. The EIR identifies the existing physical environmental conditions that exist in the project area and which could change as a result of the proposed project activities and components. The environmental setting generally reflects the physical environmental conditions of the project area as they existed at the time the SUHSD published its NOP for this EIR (February 2016). This setting constitutes the baseline physical conditions by which the SUHSD is determining whether the physical change that occurs to the environment as a result of the proposed Menlo Park Small High School Project is significant. In accordance with CEQA Guidelines Section 15125(a), the environmental setting describes only those physical environmental conditions necessary to understand the significant effects of the project and its alternatives.

Step 2: Compliance with Applicable Laws, Ordinances, Statutes, and Regulations. The EIR presumes, unless specifically noted, that the project would be designed, constructed, operated, and maintained in accordance with the applicable requirements described in the regulatory setting discussion. The regulatory setting is not intended to be exhaustive; rather, it is intended to provide a summary of key regulatory requirements that materially affect the relationship between the project's design, construction, operation, and maintenance and potential environmental impacts. In addition, the regulatory setting does not summarize regulations that do not apply to the proposed project's components and activities.

Step 3: Analysis of Project Impacts. The EIR evaluates the significance of the project's potential impacts, i.e., the change to the physical environmental conditions that could result from implementation of the project, on the full range of resources identified in Appendix G to the CEQA guidelines. Pursuant to CEQA Guidelines Section 15126, this EIR analyzes the potential environmental impacts stemming from all phases of the proposed project. This examination is based on the incremental change to the existing physical conditions that would result from the implementation of the proposed project, and considers public comments received on the scope and content of the EIR.

This EIR evaluates the proposed project's potential impacts against thresholds of significance specific to the resource being evaluated. The SUHSD selected significance criteria based primarily on Appendix G to the CEQA Guidelines; however, thresholds from other sources, such as the BAAQMD and the City of Menlo Park, were considered and used where appropriate. The EIR's impact analyses consider the direct and indirect impacts of the proposed project, as well as the short-term and long-term impacts of the project, and enable the SUHSD to determine if the proposed project would have a beneficial impact, no impact, a less than significant impact, a potentially significant impact, or a significant and unavoidable impact to the environment. As described above,

the impact analyses presume compliance with applicable regulations, except where noted prior to determining significance of any potential project impact. For impacts found to be potentially significant, the SUHSD identified mitigation measures to reduce these impacts to the extent feasible (see below).

The EIR's impact analyses focuses on the project's potentially significant environmental impacts. Chapters 4 through 11 focus on the project's significant environmental impacts to specific resource areas (e.g., traffic, biological resources, noise). Chapter 12 discusses the project's contribution to cumulative impacts. Chapter 13 considers and discusses a range of reasonable alternatives to the project that would feasibly attain most of the objectives of the project but would avoid or substantially lessen any of the significant effects of the project. Finally, Chapter 14 discusses other aspects of the project, including significant environmental effects which cannot be avoided if the proposed project is implemented, significant irreversible environmental changes which would be involved in the proposed project should it be implemented, and growth-inducing impacts of the proposed project.

Step 4: Inclusion of Mitigation Measures. The EIR identifies feasible mitigation measures to avoid or minimize the significant adverse impacts resulting from project implementation. Project mitigation measures generally require the SUHSD to avoid, prevent, or minimize impacts to resources, or, if impacts do occur, to rehabilitate, restore, or compensate for the impact in a manner that is proportional to the project impact.

3.2 SUMMARY OF EIR SCOPING COMMENTS

As described in 1.4, the SUHSD filed an NOP for an EIR with the SCH on February 19, 2016 and provided a 35-day public review period for the NOP from February 19, 2016 to March 25, 2016. The SUHSD also submitted the proposed scope of work for the transportation impact analysis (TIA) prepared for this EIR to the City of Menlo Park prior to issuing the NOP.

The SUHSD received written comments from the following agencies, organizations, and individuals on the NOP:

Public Agencies

- Caltrans
- Native American Heritage Commission
- West Bay Sanitation District

Interested Individuals and Organizations

- Richard Schlenker (Exponent)
- Calvin Fong (InfoImage)
- Gilbert Amoroso (S.J. Amoroso Properties)

Written comments received on the scope of the EIR are presented in Appendix A. Written comments germane to the scope and content of the EIR are briefly summarized below, followed by where each comment type is addressed in the Draft EIR:

- CEQA notification process and requirements: Chapter 1, Introduction
- Potential impacts from student and staff vehicle trips, including traffic congestion on state and local roadways, parking: Chapter 4, Traffic and Transportation
- Consultation with Native American Tribes and potential impacts to tribal cultural resources: Chapter 7, Cultural Resources
- Potential student loitering: Chapter 4, Traffic and Transportation, and Chapter 11, Public Services and Utilities
- Site hazards, including soil conditions and adjacent industrial land uses: Chapter 8, Hazards and Hazardous Materials

- Potential need for upsizing sanitary sewer utility systems: Chapter 11, Public Services and Utilities

3.3 PROJECT IMPACTS FOUND NOT TO BE SIGNIFICANT

The SUHSD has determined, using the Environmental Checklist Form contained in Appendix G to the CEQA Guidelines as a guide, the implementation of the proposed Menlo Park Small High School Project would clearly result in no impact or a less than significant impact for the resources described below. In addition, Chapter 4– Chapter 11 of this EIR include a summary of the project impacts found to be less than significant for specific resource areas (e.g., biological resources) in which one or more impacts were also determined to be potentially significant. This summary, which is found under the "Project Impacts and Mitigation Measures" heading of each chapter (typically sub-section 3), indicates which impacts are not evaluated further in this EIR.

3.3.1 Aesthetics

Construction of the Menlo Park Small High School Project would not result in a substantial adverse effect on a scenic vista, would not substantially damage scenic resources, would not degrade the existing visual character or quality of the site, and would not create a new source of light or glare which would adversely affect day or night time views in the area.

The Menlo Park Small High School would be visible from Highway 101 and, potentially, the Menlo Gateway hotel, which would be located approximately one-quarter mile west of the proposed school; however, in general, there are no sensitive visual receptors near the proposed school site. There are no long range sweeping views of valleys, hills, mountains, baylands, ocean or the urban skyline readily viewable from the proposed school site or most of the local roads used to access the proposed school site such as Jefferson Drive and Independence Drive. The City has not designated scenic corridors and the closest designated Scenic Highway (Interstate 280) is approximately five miles west of the proposed school site. Therefore, the proposed project does not have the potential to affect a scenic vista or damage scenic resources within a state scenic highway.

The proposed project is located in an area of Menlo Park currently undergoing a large amount of redevelopment and zoning changes. The proposed school buildings would be approximately 50 feet tall on the western and southern sides; however, this height is consistent with existing and approved development in the City's Bayfront Area. The Facebook Campus and Commonwealth Corporate Center Projects both have buildings above the existing M-2 zoning height limit of 35 feet, and the approved Menlo Gateway Project is permitted to have a maximum building height limits of up to 6 stories or 120 feet (Menlo Park 2016). Thus, the project would not degrade the existing visual character or quality of the area. For these reasons, the potential aesthetic impacts resulting from implementation of the proposed Menlo Park Small High School Project are not discussed further in this EIR.

3.3.2 Agricultural and Forestry Resources

Implementation of the Menlo Park Small High School Project would not impact agricultural or forestry resources. 150 Jefferson Drive does not support any agricultural or forestry resources and is identified as urban and built up land according to the California Department of Conservation's Farmland Mapping and Monitoring Program (CDC 2014). The property is zoned "General Industrial" by the City of Menlo Park and is not under any Williamson Act contract (CDC 2012). Likewise, neither the proposed school site, nor the surrounding area is zoned as forest land, timberland, or timberland production. Thus, the Menlo Park Small High School

Project would have no impact on agricultural or forestry resources. For these reasons, potential agricultural and forestry-related impacts from implementation of the Menlo Park Small High School Project are not discussed further in this EIR.

3.3.3 Geology and Soils

The information contained in this section is based on the Geotechnical Investigation and Geologic Hazards Evaluation prepared for the proposed project by Cornerstone Earth Group (Cornerstone 2016). The main contents of this report are provided as Appendix B to this EIR; appendices to this report are available for review at the District's offices at 480 James Avenue, Redwood City, and are available electronically on CD.

3.3.3.1 Environmental Setting

The San Francisco Bay Area is one of the most seismically active areas in the country. While seismologists cannot predict earthquake events, the U.S. Geological Survey's Uniform California Earthquake Rupture Forecast estimates there is a 72 percent chance of at least one magnitude 6.7 or greater earthquake occurring in the Bay Area region by 2045 (USGS 2015). Significant earthquakes that occur in the Bay Area are generally associated with crustal movement along well-defined, active fault zones such as the San Andreas, Hayward, and Calaveras fault zones. The Geotechnical Investigation and Geologic Hazards Evaluation prepared by Cornerstone identifies several faults in close proximity to the proposed Menlo Park Small High School site, including the Monte Vista - Shannon fault (5.1 miles away) and Northern San Andreas fault (6.6 miles away). The proposed Menlo Park Small High School site however, is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, and there is no evidence of historical fault rupture at the proposed school site.

The proposed school site is underlain by artificial fill and fine grained alluvium. During soil borings, ground water was encountered at depths between 6 and 6¼ feet. Expansive soil is soil that can exhibit significant changes in volume when there are fluctuations in moisture content. In general, expansive soils will shrink and harden under dry conditions and will swell and soften under wet conditions. These changes in volume can affect building foundations, structures, pavement and other built improvements. Plasticity tests conducted by Cornerstone found that site soils have a high expansion potential during wetting and drying cycles.

Liquefaction is a condition where relatively loose, saturated sands to silty sands lose their shear strength during strong ground shaking (i.e., during an earthquake). The proposed School Site is located within a State – designated liquefaction hazard zone (Cornerstone 2016). An analysis of site liquefaction and settlement hazards based on a peak ground acceleration of approximately 6.3 meters per second-squared generated by a magnitude 7.9 earthquake on the San Andreas Fault was found to lead to soil softening and a post-liquefaction total settlement depth of 1/5 inch. Ground rupture is not anticipated at the site because liquefiable soils are present up to 50 feet deep at the site and there is a sufficient cap of non-liquefiable materials to prevent ground rupture.

The proposed school site is flat and there are no slopes nearby. Lateral spreading risk at the site is considered low, and the project site is not located within a landslide hazard area.

3.3.3.2 Regulatory Setting

Under California Education Code section 17212 and 17212.5, the SUHSD is required to perform geological and soil engineering studies prior to acquiring any school site and/or constructing any school building. The intent of these studies is to ensure that a proposed school site does not have geological and site characteristics that would make construction of a school economically

infeasible, and that no school building would be located within a fault zone or other area where surface rupture can reasonably be expected to occur within the life of the school building. Project design would also need to meet California Building Code (CBC) requirements.

3.3.3.3 Impact Discussion

The site-specific geotechnical reports prepared for the project include an evaluation of seismic shaking potential and seismic-related ground failure hazards including ground rupture, liquefaction, subsidence, collapse, and lateral spreading. The reports conclude that, from a geotechnical standpoint, the proposed project is feasible. The report finds that potential concerns with the medium stiff clay layer encountered between a depth of 5 to 10 below ground surface, the presence of highly expansive soils and the presence of shallow ground water can be avoided with recommendations related to structural seismic design criteria, deep foundations, slabs on grade, and asphalt concrete (see Appendix B). In addition, the reports recommend that although fills were not encountered in the borings, all artificial fill soils within building areas should be completely removed. Assuming the fills meet the "Material for Fill" requirements specified in the Geotechnical Report, the fills can be reused and compacted in place within building areas after input from a Cornerstone representative.

The SUHSD would incorporate all recommendations from the project's site-specific geotechnical evaluations into the final project plans, and all structures are required to conform with current building code requirements. Inclusion of geotechnical recommendations and adherence with building code requirements would render any potential impacts related to seismic hazards and soils less than significant. For these reasons, potential geologic-, seismic-, and soils-related impacts from implementation of the proposed project are discussed further in this EIR. Please refer to Chapter 9, Hydrology and Water Quality, for a discussion of potential erosion impacts.

3.3.4 Greenhouse Gases and Energy

Gases that trap heat in the atmosphere and affect regulation of the earth's temperature are known as "greenhouse" gases (GHG). This section provides information on the environmental and regulatory GHG setting pertaining to the proposed Menlo Park Small High School Project and the amount of GHG that could be emitted by the project.

3.3.4.1 Environmental Setting

Many chemical compounds found in the earth's atmosphere exhibit a GHG property. GHG allow sunlight to enter the atmosphere freely. When sunlight strikes the earth's surface, some of it is reflected back towards space as infrared radiation (heat). GHG absorb this infrared radiation and trap the heat in the earth's atmosphere. GHG that contribute to climate regulation are a different type of pollutant than criteria or hazardous air pollutants because climate regulation is global in scale, both in terms of causes and effects. Some GHG are emitted to the atmosphere naturally by biological and geological processes such as evaporation (water vapor), aerobic respiration (carbon dioxide), and off-gassing from low oxygen environments such as swamps or exposed permafrost (methane); however, GHG emissions from human activities such as fuel combustion (e.g., carbon dioxide) and refrigerants use (e.g., hydrofluorocarbons) significantly contribute to overall GHG concentrations in the atmosphere, climate regulation, and global climate change. Human production of GHG has increased steadily since pre-industrial times (approximately pre-1880) and atmospheric carbon dioxide concentrations have increased from a pre-industrial value of 280 parts per million (ppm) in the early 1800's to 408 ppm in May 2016 (NOAA 2016). The effects of increased GHG concentrations in the atmosphere include climate change (increasing

temperature and shifts in precipitation patterns and amounts), reduced ice and snow cover, sea level rise, and acidification of oceans. These effects in turn will impact food and water supplies, infrastructure, ecosystems, and overall public health and welfare. The six common GHG are described below.

- **Carbon Dioxide (CO_2)**. CO_2 is released to the atmosphere when fossil fuels (oil, gasoline, diesel, natural gas, and coal), solid waste, and wood or wood products are burned.
- **Methane (CH_4)**. CH_4 is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from the decomposition of organic waste in municipal solid waste landfills and the raising of livestock.
- **Nitrous Oxide (N_2O)**. N_2O is emitted during agricultural and industrial activities, as well as during combustion of solid waste and fossil fuels.
- **Sulfur Hexafluoride (SF_6)**. SF_6 is commonly used as an electrical insulator in high voltage electrical transmission and distribution equipment such as circuit breakers, substations, and transmission switchgear. Releases of SF_6 occur during maintenance and servicing as well as from leaks of electrical equipment.
- **Hydrofluorocarbons (HFCs) and Perfluorocarbons (PFCs)**. HFCs and PFCs are generated in a variety of industrial processes. Although the amount of these gases emitted into the atmosphere is small in terms of their absolute mass, they are potent agents of climate change due to their high global warming potential.

GHG can remain in the atmosphere long after they are emitted. The potential for a particular greenhouse gas to absorb and trap heat in the atmosphere is considered its global warming potential (GWP). The reference gas for measuring GWP is CO_2, which has a GWP of one. By comparison, CH_4 has a GWP of 25, which means that one molecule of CH_4 has 21 times the effect on global warming as one molecule of CO_2. Black carbon consists of particles emitted during combustion; although a particle and not a gas, black carbon also acts to trap heat in the Earth's atmosphere.

3.3.4.2 Regulatory Setting

In 2006, the California State Legislature adopted the California Global Warming Solutions Act of 2006, Assembly Bill (AB) 32, which required the California Air Resources Board (CARB) to: 1) determine 1990 statewide GHG emissions, 2) approve a 2020 statewide GHG limit that is equal to the 1990 emissions level, 3) adopt a mandatory GHG reporting rule for significant GHG emission sources, 4) adopt a Scoping Plan to achieve the 2020 statewide GHG emissions limit, and 5) adopt regulations to achieve the maximum technologically feasible and cost-effective reductions. In 2007, CARB approved a statewide 1990 emissions level and corresponding 2020 GHG emissions limit of 427 million metric tons of carbon dioxide equivalents ($MTCO_2e$) (CARB 2007). In 2008, CARB adopted its Climate Change Scoping Plan, which projects, absent regulation or under a "business as usual" (BAU) scenario, 2020 statewide GHG emissions levels of 596 million $MTCO_2e$ and identifies the numerous measures (i.e., mandatory rules and regulations and voluntary measures) that will achieve at least 174 million $MTCO_2e$ of reductions and reduce statewide GHG emissions to 1990 levels by 2020 (CARB 2009). In 2011, CARB released a supplement to the 2008 Scoping Plan Functional Equivalent Document that included an updated 2020 BAU statewide GHG emissions level projection of 507 million $MTCO_2e$ (CARB 2011), and in 2014 CARB adopted its First Update to the Climate Change Scoping Plan (CARB 2014).

Executive Order B-30-15, 2030 Carbon Target and Adaptation, issued by Governor Brown in April 2015, sets a target of reducing GHG emissions by 40 percent below 1990 levels in 2030. By directing state agencies to take measures consistent with their existing authority to reduce GHG emissions, this order establishes coherence between the 2020 and 2050 GHG reduction goals set by AB 32 and seeks to align California with the scientifically established GHG emissions levels needed to limit global warming below two degrees Celsius. There are five key goals for reducing GHG emissions in California through 2030: (1) increase renewable electricity to 50 percent; (2) double energy efficiency savings achieved in existing buildings and make heating fuels cleaner; (3) reduce petroleum use in cars and trucks by up to 50 percent; (4) reduce emissions of short-lived climate pollutants, and (5) manage farms, rangelands, forests and wetlands to increasingly store carbon. In addition, the order requires CARB to work closely with other state agencies and the public to update the State's climate change Scoping Plan, scheduled for completion and adoption in 2016.

In 2008, the Sustainable Communities and Climate Protection Act, Senate Bill (SB) 375, was adopted to connect the GHG emissions reductions targets established in the Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce vehicle miles travelled and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 regions in California managed by a metropolitan planning organization. The Metropolitan Transportation Association and the Association of Bay Area Governments adopted a sustainable communities strategy to meet state GHG reduction goals, Plan Bay Area. Plan Bay Area sets forth two required and eight voluntary performance standards covering a wide array of topics and issues, including a seven percent reduction in per capita GHG emissions from cars and light duty trucks by 2020, and a 15 percent per capita reduction by 2035.

As described in Chapter 5, Air Quality, the BAAQMD's 2010 Clean Air Plan is a multi-pollutant plan that includes specific measures and actions that the BAAQMD and its partners will implement to improve air quality, protect public health, and protect our climate. The 2010 Clean Air Plan includes a focus on managing Bay Area emissions of the six common GHG (BAAQMD 2010).

School projects must be designed in accordance with Title 24 of the California Building Standards Code. Title 24 is a California amended version of the International Building Code.

3.3.4.3 GHG Impact Discussion

As described in Chapter 5, Air Quality, in May 2011 the BAAQMD published new CEQA guidelines that contain the BAAQMD's recommendations to Lead Agencies for evaluating and assessing the significance of a project's potential air impacts, including GHG impacts (BAAQMD 2011). For non-stationary sources of emissions such as the proposed project, the BAAQMD recommends use of a numerical significance threshold equivalent to 1,100 $MTCO_2e$ for project operations; the BAAQMD does not maintain a threshold of construction GHG emissions.

Included in these guidelines, is Table 3-1, "Operational-Related Criteria Air Pollutant and Precursor Screening Level Sizes" (BAAQMD 2011). The values seen in Table 3-1 of the BAAQMD CEQA guidelines were derived using the default assumptions used by the Urban Land Use Emissions Model (URBEMIS) and off-model GHG estimates for indirect emissions from electrical generation, solid waste and water conveyance. The Menlo Park Small High

School Project's proposed three-story story building would be approximately 45,000 square-feet. This is less than the operational GHG screening size for high schools established by the BAAQMD of 49,000 square-feet. Since the proposed high school is smaller than the screening size, the project would not exceed the 1,100 $MTCO_2e$ GHG threshold and therefore would have a less than significant on GHG.

All projects submitted to the DSA for plan review must comply with DSA and California Energy Commission (CEC) requirements. The CEC adopted the 2013 Building Energy Efficiency Standards on May 31, 2012, and the California Building Standards Commission approved the standards for publication. The effective date is July 1, 2014. DSA reviews all applications for compliance to these standards. Thus, the project would not conflict with any plan or policy intended to reduce GHG emissions.

For these reasons, potential GHG emissions impacts from implementation of the proposed project are not discussed further.

3.3.4.4 Energy Impact Discussion

Implementation of the proposed small high school project would not result in a substantial increase in energy demand or the wasteful use of fuel or energy. The project would be designed to meet the CEC's energy efficiency standards described above and would include sustainable design features that reduce standard electricity consumption and usage, such as the proposed ground source heat pump system. For these reasons, potential energy impacts from implementation of the proposed project are not discussed further.

3.3.5 Land Use and Planning

The Menlo Park Small High School would be located at 150 Jefferson Drive, an approximately 2.1-acre parcel of land located in the City of Menlo Park's Bayfront Area, in San Mateo County (APN 055-243-030). The proposed school site and the area surrounding the proposed school site is generally zoned and designated by the City's as M-2, "Limited Industry"; however, as part of the City's General Plan Update (Connect Menlo), the Bayfront Area is transitioning from 1960's and 1970's industrial / warehouse land uses to newer, corporate campuses and mixed biotechnology, commercial, office, and other land uses.

Government Code section 53094(b) authorizes the Governing Board of a school district, by two-thirds vote, to render city or county zoning ordinances inapplicable to the proposed use of property by the school district. The exemption from city and county zoning ordinances does not apply to those regulating drainage improvements and conditions, road improvements and conditions, or grading plans as they relate to the design and construction of on-site improvements which affect drainage, road conditions or grading. On May 11, 2016, the SUHSD adopted Resolution No. 1521 rendering zoning ordinances of the City of Menlo Park inapplicable to the proposed Menlo Park Small High School project (SUHSD 2016).

Government Code section 65402, together with California Public Resources Code section 21151.2, requires the Governing Board of a school district, before acquiring title to property for a new school site or an addition to a present school site, to provide the planning commission having jurisdiction over the site written notice of the proposed acquisition so that the commission can investigate the site and determine whether the proposed location, purpose, and extent of the acquisition is in conformance with the adopted General Plan. The SUHSD provided written notice of the proposed acquisition to the City of Menlo Park's Planning Commission on January 7, 2015. On January 26, 2015, the City of Menlo Park's Planning Commission adopted

Resolution No. 2015-01, determining that the proposed project is consistent with the City's General Plan (City of Menlo Park 2015).

The SUHSD is a local educational agency and political subdivision of the State of California. As such, local plans, policies, and regulations typically do not directly apply to the SUHSD and its facilities, particularly classroom facilities such as the proposed small high school, which are subject to review and inspection by the Division of the State Architect. As such, the project would not significantly conflict with any applicable City land use plan, policy, or regulation. In addition, the proposed Menlo Park Small High School Project does not have the potential to physically divide an established community because it would redevelop an existing land parcel located in a commercial / industrial area of the City. Finally, the proposed project does not have the potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan because no such plan is in effect that covers the proposed school site. For these reasons, the land use and planning impacts from implementation of the project are not discussed further in this EIR.

3.3.6 Mineral Resources

The proposed project is not located in an area identified in the Menlo Park General Plan as a locally-important mineral resource recovery site (City of Menlo Park 2013). The closest mineral resources to the proposed project are the salt points in Redwood City; however, ongoing salt production would not be affected by the proposed project given that it is outside of the salt points project area (Menlo Park 2016). For these reasons, potential mineral resource impacts from implementation of the project are not evaluated further in this EIR.

3.3.7 Population and Housing

The proposed Menlo Park Small High School Project would not induce substantial 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), would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere, and would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. The proposed project consists of constructing a new small high school at 150 Jefferson Drive intended to accommodate the growth in student enrollment expected to occur in the SUHSD and would serve to alleviate potential overcrowding conditions. The project does not involve displacement or construction of any new residences, and would not extend roads or other infrastructure. The approximately 35 faculty and staff the SUHSD would hire to support the new school are likely to already live and commute in the Bay Area, and would not significantly reduce the available housing stock in the school attendance area or City of Menlo Park. For these reasons, potential population and housing impacts from implementation of the project are not discussed further in this EIR.

3.3.8 Recreation

The proposed project would not induce population growth; however, in the future, the students attending the Menlo Park Small High School may establish athletic teams that could existing SUHSD and/or public fields, parks, and other facilities for practices (see section 2.2.3). The SUHSD anticipates that the Menlo Park Small High School would not have a sports team until the 2019 or 2020 school year at the earliest. At that time the SUHSD anticipates the initial sports teams could include a badminton team (which may practice at Synergy Badminton Club, approximately one block away from the proposed school), a soccer team (which would practice

at Flood Park, approximately two miles away from the proposed school via surface streets), and/or other teams not yet identified (which may practice at East Palo Alto Academy in East Palo Alto). The use of these existing facilities would be consistent with available facilities and subject to negotiations and/or conditions with the facilities' primary owners / caretakers, and would not result in the accelerated deterioration of the facilities. Thus, for these reasons, the potential impacts to recreational facilities resulting from the implementation of the Menlo Park Small High School Project are not discussed further.

3.4 REFERENCES

Bay Area Air Quality Management District (BAAQMD) 2010. "2010 Clean Air Plan." 2010 Clean Air Plan. BAAQMD, Planning Rules, and Research Division, Plans. October 4, 2010. Web. August 20, 2014. <http://www.baaqmd.gov/Divisions/Planning-and-Research/Plans/Clean-Air-Plans.aspx.>

_____ 2011. California Environmental Quality Act Air Quality Guidelines. San Francisco, CA. June 2010, updated May 2011.

California Air Resources Board (ARB) 2007. *Staff Report California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit.* Sacramento, CA. November 16, 2007. <http://www.arb.ca.gov/cc/inventory/pubs/reports/staff_report_1990_level.pdf>

_____2009. Climate Change Scoping Plan – A Framework for Change. Endorsed by ARB December 2008. Sacramento, CA. May 11, 2009. <http://www.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm>

_____2011. Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document. Released August 19, 2011. Sacramento, CA. Approved August 24, 2011. http://www.arb.ca.gov/cc/scopingplan/fed.htm

_____2014. *First Update to the Climate Change Scoping Plan*. Sacramento, CA. May 2014.

California Department of Conservation. 2012. San Mateo County Williamson Act FY 2006/2007. Conservation Program Report. Available online at: <ftp://ftp.consrv.ca.gov/pub/dlrp/wa/SanMateo_06_07_WA.pdf >, accessed June 15, 2016.

_____2014. San Mateo County Important Farmland 2014. Farmland Mapping and Monitoring Program. Available online at: <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2014/smt14.pdf >, accessed June 15, 2016.

City of Menlo Park. 2013. City of Menlo Park General Plan: Open Space, Conservation, Noise and Safety Elements. Adopted May 21, 2013.

_____ 2015a. Planning Commission Staff Report: January 26, 2015. Available at: http://www.menlopark.org/DocumentCenter/View/6306. Accessed July 13, 2015.

_____ 2015b. M-2 Area Potential Zoning and Street Classifications. Available at: http://menlopark.org/DocumentCenter/View/9087. Accessed February 29, 2016.

_____ 2015c. Zoning Map and General Plan Use Diagram Sheet Layout and Legend. Available at: http://www.menlopark.org/DocumentCenter/View/187. Accessed February 29, 2016.

_____ 2016. "ConnectMenlo: General Plan Land Use and Circulation Elements and M-2 Area Zoning Update." Available at: http://menlopark.org/DocumentCenter/View/10360. Accessed June 15, 2016.

Cornerstone Earth Group (Cornerstone) 2016. *Geotechnical Investigation and Geologic Hazards Evaluation for the 150 Jefferson New High School Campus*. March 23, 2016.

National Oceanic and Atmospheric Administration (NOAA) 2016. "Mauna Loa CO_2 Monthly Mean Data." *Trends in Atmospheric Carbon Dioxide*. NOAA, Earth System Research Laboratory, Global Monitoring Division. May 22, 2016. Web. June 1, 2016. <http://www.esrl.noaa.gov/gmd/ccgg/trends/>

Sequoia Union High School District (SUHSD). 2016a. *Approved Minutes of Regular Meeting of the Board of Trustees*. May 11, 2016.

United States Geological Survey (USGS) 2015. UCERF3: A New Earthquake Forecast for California's Complex Fault System. Fact Sheet 2015-3009. Washington, D.C. March 2015.

This page intentionally left blank.

CHAPTER 4 TRANSPORTATION

This chapter describes the transportation and roadway system in the vicinity of the Menlo Park Small High School Project, summarizes applicable regulations and policies, evaluates potential impacts on the roadway system and, where necessary, identifies mitigation measures to reduce or avoid the potential adverse impacts that could result from implementation of the Project. The evaluation of the potential transportation- and traffic-related impacts that could result from implementation of the project is based on a Transportation Impact Analysis (TIA) prepared by a qualified traffic engineering firm at the request of the SUHSD (Hexagon 2016). This chapter summarizes the key information and findings of the TIA. The TIA and its appendices comprise approximately 880 pages of material. Please refer to Appendix C for the main body of the TIA. TIA appendices are available for review at the SUHSD's main offices at 480 James Avenue, Redwood City, CA 94062.

4.1 ENVIRONMENTAL SETTING

The proposed Menlo Park Small High School would be located at 150 Jefferson Drive, within the City of Menlo Park's Bayfront Area, which is generally located between U.S. Highway 101 (U.S. 101) and Bayfront Expressway (State Route (SR) 84)[3]. Land uses in this part of the City consist almost entirely of light industrial and business park uses, such as the existing Bay Associates Wireless Technologies at 150 Jefferson Drive; however, as part of the City's General Plan Update (ConnectMenlo), some of these existing land uses would transition to new offices and life sciences buildings in the near future. Examples of this transition include the Facebook Campus, Commonwealth Corporate Center, and Menlo Gateway projects, all of which are within one mile of the proposed Menlo Park Small High School site (see Section 1.2, Figure 2-1 and Figure 2-2).

Figure 4-1 and Figure 4-2 provide an overview of the existing roadway network and existing and planned pedestrian and bicycle facilities in the vicinity of the proposed school site, which fronts Jefferson Drive and is near several major roadways and other features that generally restrict pedestrian, bicycle, and vehicular access to the project vicinity, including U.S. 101) Bayfront Expressway, Marsh Road, and the Dumbarton Rail Corridor.

4.1.1 Roadway Network

Roadways providing access to the City's Bayfront Area and the proposed school site consist of freeways/expressways, primary and minor arterial roads, collector roads, and local streets[4]. The existing roadway network near the proposed school site is shown in Figure 4-1. Streets in Menlo Park generally do not follow a true north-south or east-west alignment; however, for the purposes of this EIR, U.S. 101 was considered to have a north-south alignment. The alignment of all other streets was established based on the street's relative position to U.S. 101.

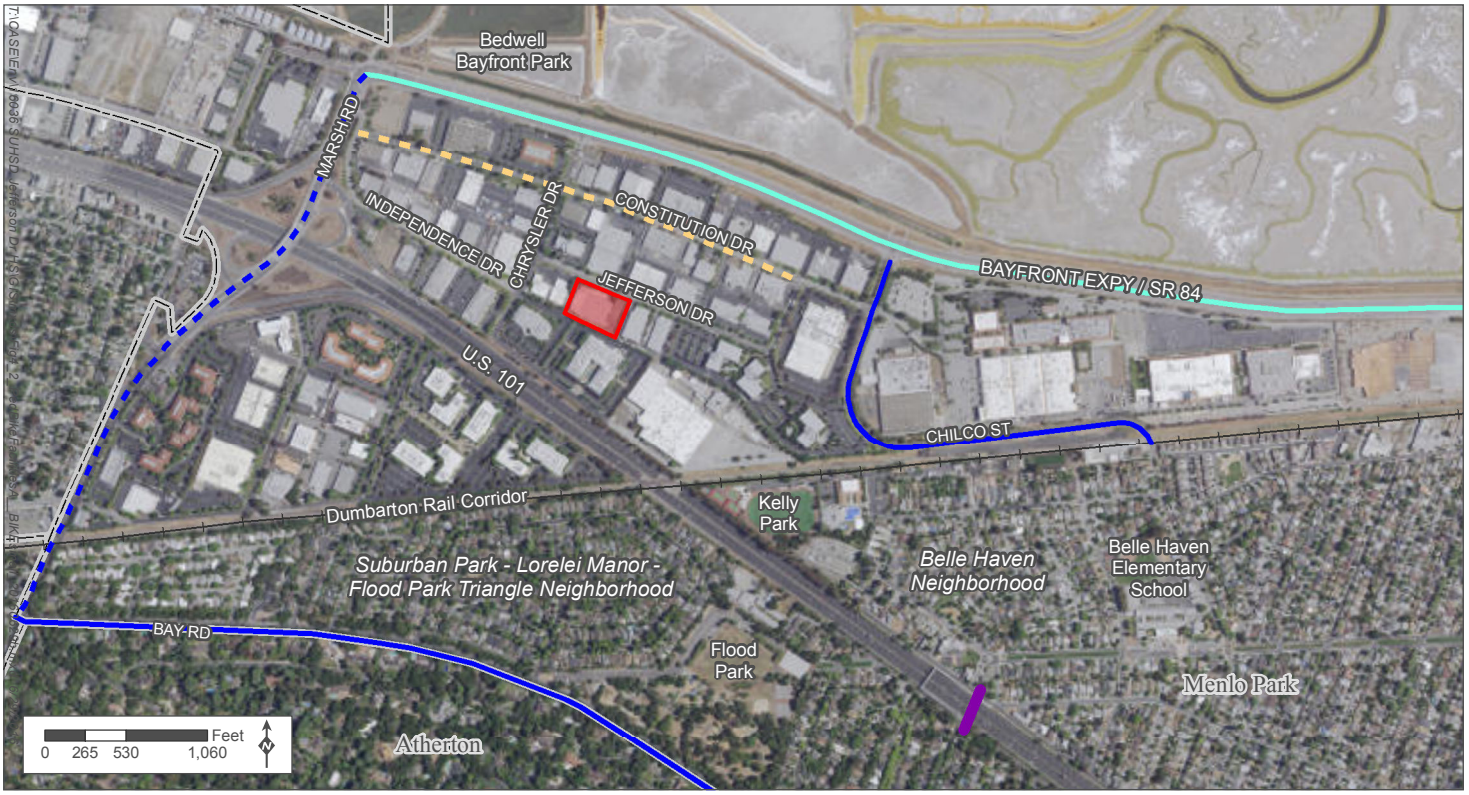
[3] The City's Bayfront Area includes all of the City's M-2 zoned lands (General Industrial District) and is therefore also referred to as the M-2 area.

[4] The City of Menlo Park's General Plan Land Use and Circulation Element provides descriptions and guidelines for these different roadway types. In general, freeways/expressways are access-controlled, multi-lane facilities that regional and/or subregional traffic. Primary and minor arterial are moderate to high volume roadways that connect major activity centers, while collector roads are moderate to light volume roadways that serve as conduits between local areas and neighborhoods and arterial roadways (and vice versa). Local streets provide multi-modal, low-speed direct access to individual sites.

Source: ESRI, 2016; Hexagon, 2016; MIG|TRA, 2016

- Proposed Small High School Site
- City Boundary
- Rail Line
- Study Intersection
- Study Roadway Segment
- Freeway Interchange
- Route of Regional Significance

Figure 4-1 Existing Roadway Network



Source: ESRI, 2016; Hexagon, 2016; City of Menlo Park, 2016; MIG|TRA, 2016

Proposed Small High School Site
City Boundary
Rail Line
Roadway has no sidewalk at least one side
Roadway has partial sidewalk both sides
Roadway has 100% sidewalk both sides
Bicycle / Pedestrian Bridge
Existing Bicycle Path (Class I)
Existing Bicycle Path (Class II)
Proposed Bicycle Path (Class II)
Proposed Bicycle Path (Class III)
Bicycle / Pedestrian Bridge

Figure 4-2 Existing and Planned Pedestrian and Bicycle Facilities

U.S. 101 and Bayfront Expressway (SR 84) provide the primary regional access to north Menlo Park and its Bayfront Area:

- **U.S. 101** is a major north-south transportation corridor on the San Francisco Peninsula. Near Menlo Park, U.S. 101 is an eight-lane freeway with a posted speed limit of 65 miles per hour (mph). The primary interchange that provides access to the City's Bayfront Area and proposed school site is the Marsh Road interchange, which is approximately 0.5 miles north of the proposed school site. Another interchange that could provide access to the City's Bayfront Area and proposed project site is the Willow Road (SR 114) interchange, located more than one mile south of the proposed school site. At its closest point, U.S. 101 is approximately 475 feet southwest of the proposed school site[5].
- **Bayfront Expressway (SR 84)** is a divided State Highway that connects the East Bay region with Menlo Park via the Dumbarton Bridge, and with Highway 1 and the community of San Gregorio via Woodside and La Honda. Near Menlo Park, Bayfront Expressway is a north-south oriented expressway with three lanes in each direction and has a posted speed limit that ranges from 45 to 50 mph. At its closest point, U.S. 101 is approximately 475 feet southwest of the proposed school site[6].

A number of arterial, collector, and local roads provide local access to and around the Bayfront Area and the proposed school site:

- **Marsh Road** is an east-west arterial road that runs between Middlefield Road in the Town of Atherton and Bayfront Expressway. Between Bohannon Drive and Bayfront Expressway (which includes the U.S. 101 / Marsh Road interchange), Marsh Road is a four- to six-lane primary arterial road with a posted speed limit of 35 mph.
- **Independence Drive** is a north-south, two-lane local street that runs between Marsh Road (eastbound direction only) and Chrysler Drive. Its intersection with Marsh Road is one of three access points into the proposed project vicinity. Independence Drive has a posted speed limit of 25 mph.
- **Constitution Drive** is an east-west, two-lane collector street that runs from Independence Drive to Chilco Drive and has a posted speed limit of 35 mph.
- **Chrysler Drive** is an east-west, two-lane roadway that runs between Bayfront Expressway and Commonwealth Drive. Its intersection with Bayfront Expressway provides another access point into the proposed project vicinity. Between Bayfront Expressway and Constitution Drive, the City designates Chrysler Drive as a collector street; between Constitution Drive and Commonwealth Drive (which includes the Chrysler Drive / Jefferson Drive intersection), the City designates Chrysler drive as a local street. Chrysler Drive has a posted speed limit of 35 mph.

[5] This value reflects the distance between the property line at 150 Jefferson Drive and the edge of the nearest travel lane on U.S. 101 (northbound).

[6] This value reflects the distance between the property line at 150 Jefferson Drive and the edge of the nearest travel lane on Bayfront Expressway (southbound).

- **Jefferson Drive** is an east-west, two-lane local street that runs between Chrysler Drive and Constitution Drive and has a posted speed limit of 25 mph. Jefferson Drive provides direct access to the proposed school site.
- **Chilco Street** is primarily a two-lane roadway that runs between Bayfront Expressway and Windermere Avenue and Newbridge Street in the City of Menlo Parks' Belle Haven neighborhood, as follows.
    - Between Bayfront Expressway and Constitution Drive, the City designates Chilco Street as a collector street. The posted speed limit on this east-west section of the street is 35 mph.
    - West of Constitution Drive, the City designates Chilco Street as a local street. The road bends and runs in a north-south direction, parallel to the Dumbarton Rail Corridor, for approximately 0.25 miles, before turning and crossing over the Dumbarton Rail Corridor, into the Belle Haven Neighborhood. The posted speed limit on this north-south section of the street is 40 mph.
    - After crossing the rail corridor, Chilco Street resumes its east-west orientation through the Belle Haven Neighborhood for approximately 0.4 miles, intersection with Hamilton Avenue, Ivy Drive, and Newbridge Street, all of which connect to Willow Road. The posted speed limit on this section of Chilco Street is 25 mph.

  Chilco Street provides access to/from the project site via its intersection with Bayfront Expressway as well as access to/from the Belle Haven neighborhood.

4.1.1.1 City-Designated Truck Routes

Several roads in the vicinity of the proposed school site are designated by the City of Menlo Park as approved / unlimited truck routes, including U.S. 101, Bayshore Expressway, and Marsh Road (City of Menlo Park 2016).

4.1.2 Public Transit Service

Transit service in Menlo Park is primarily provided by Caltrain and the San Mateo County Transit District (SamTrans). These transit services are described below.

4.1.2.1 Caltrain Commuter Rail Service

Caltrain operates a commuter rail service seven days a week between the Diridon Station in San Jose and San Francisco. The Menlo Park Caltrain Station is located near the City's downtown area, at the north-east corner of the El Camino Real/Ravenswood Avenue intersection. This station is an approximately 3.5-mile bicycle ride (20 to 30 minutes) or walk (1 hour to 1 ½ hours) from the proposed school site; however, SamTran's Marsh Road Shuttle provides direct service between the Menlo Park Caltrain Station and 150 Jefferson Drive (see 4.1.2.2). The Marsh Road Shuttle is scheduled to serve trains arriving from points north of Menlo Park between 6:56 and 9:25 AM (six trains) and 3:14 and 6:19 PM (seven trains), and from points south of Menlo Park between 6:39 and 9:17 AM (seven trains) and 3:02 and 6:36 PM (six trains).

4.1.2.2 SamTrans Bus and Shuttle Service

SamTrans is a fixed-route bus transit service operating within the San Mateo County. SamTrans primarily serves as a local transit provider within San Mateo County, but also provides connecting regional services to neighboring Santa Clara and San Francisco Counties. In general, all SamTrans buses are equipped with bike racks; two additional bikes are allowed inside the bus, depending on passenger loads.

In April 2015, the SUHSD met with SamTrans representatives to discuss the timeline, anticipated enrollment, and student locations for the proposed Menlo Park Small High School. SamTrans noted the proposed school site is an area between Route 270 / 276, serving Redwood City, and Route 280, serving East Palo Alto, and is not currently served by an existing bus route (SamTrans 2015). Although direct bus service to the proposed school site is not available at this time, several routes provide service the City's Bayfront Area and project vicinity, as follows:

- *Local Route 82* provides service during school days only between the intersection of Bay Road and Marsh Road and Hillview School. One trip (from Bay Road/Marsh Road to Hillview School) is provided in the morning, between 7:42 and 8:07 AM and two trips (from Hillview School to Bay Road/Marsh Road) is provided in the afternoon, between 2:35 and 3:44 PM on selected days.
- *Local Route 88* provides service during school days only between the intersection of Bay Road and Marsh Road and Encinal Elementary School. One trip (from Bay Road/Marsh Road to Encinal Elementary School) is provided in the morning, between 7:17 and 7:50 AM and two trips (from Encinal Elementary School to Bay Road/Marsh Road) is provided in the afternoon, between 2:02 and 3:43 PM on selected days.
- *Local Route 270* provides service to the Redwood City Transit Center via Bay Road, Marsh Road, and Haven Avenue in the vicinity of the project site. The closest bus stop to the project site for Route 270 is located along Haven Avenue, north of Marsh Road. Route 270 operates on weekdays and Saturdays with 60-minute headways.
- *Local Route 281* provides service to the Stanford Shopping Mall and Onetta Harris Center via New Bridge Street and Ivy Drive in the Belle Haven neighborhood. Route 281 operates seven days a week with 15-minute headways during the weekday peak commute hours.

In addition, one shuttle service route currently provides direct access to the proposed school site:

- The *Marsh Road Shuttle* provides free shuttle service between the Menlo Park Caltrain Station and the project area on weekdays. This service is available to the general public and runs along Middlefield Road, Marsh Road, Constitution Drive, Jefferson Drive, Chilco Street, and Bayfront Expressway (with scheduled stops at 150 Jefferson Drive). Four trips are made from the Menlo Park Caltrain Station to the project area between 6:58 and 9:25 AM, with the last trip arriving at the project site around 9:42 AM. Five trips are made in the afternoon/evening, with the stops at the project site scheduled for 2:27, 3:31, 4:09, 4:44, and 5:51 PM.

4.1.3 Pedestrian and Bicycle Facilities

Pedestrian facilities near the proposed school site include sidewalks, marked crosswalks at intersections, and pedestrian push buttons and signal heads at signalized intersections.

4.1.3.1 Existing and Planned Pedestrian Facilities

In general, as shown in Figure 4-2, pedestrian and bicycle facilities are present along all or portions of each arterial and local roadway described in Section 4.1.1. Sidewalks are present along both sides of Marsh Road and along both sides of all streets within the City's Belle Haven neighborhood; however, closer to 150 Jefferson Drive, sidewalks become somewhat intermittent. For example, the portion of Chilco Street that parallels the Dumbarton Rail Corridor currently lacks sidewalks (although there is separated bike lane). In addition, sidewalks are partially or completely missing on at least one side of the road along Constitution Drive, Independence

Drive, Chrysler Drive, and Jefferson Drive. Sidewalks are not present along Bayfront Expressway; however, the San Francisco Bay Trail runs along the east side of Bayfront Expressway and can be used by both pedestrians and bicyclists. In addition, a pedestrian overpass providing access over U.S. 101 and into the Belle Haven neighborhood is present at the end of Ringwood Avenue.

While most unsignalized intersections near the proposed school site are controlled by stop signs, few have crosswalks. Signalized intersections near the proposed school site (e.g., Chilco Street and Bayfront Expressway) have marked crosswalks and include pedestrian push buttons and signal heads.

The SUHSD notes the above information describes pedestrian facilities at the time the SUHSD issued the Notice of Preparation for this EIR (February 2016). As noted in Section 4.1, the proposed Menlo Park Small High School Project is located in an area of the City that is transitioning from 1960's and 1970's industrial / warehouse land uses to newer, corporate campuses and mixed biotechnology and office land uses. The City anticipates this transition will increase the need for pedestrian and bicycle facilities in the City's Bayfront Area. Specifically, the City's Sidewalk Master Plan identifies many of the streets near the proposed Menlo Park Small High School site to have a medium or high priority for sidewalk improvements that increase walkability (City of Menlo Park 2009).

4.1.3.2 Existing and Planned Bicycle Facilities

The City of Menlo Park designates bikeways according to the standards set forth in the Caltrans Highway Design Manual and Design Information Bulletin 89, which identifies Class I, Class II, Class III, and Class IV bikeway standards. A Class I bicycle path is a paved trail completely separate from the roadway. A Class II bicycle lane is a striped and signed lane for one-way bike travel on a street or highway. A Class III bicycle route only has signs and is a shared bicycle / motor vehicle travel lane on a street or highway. Class III bicycle routes may be defined by a wide curb lane and/or use of a shared use arrow stencil marking the pavement known as a "sharrow". A Class IV bikeway is a separated track or other bikeway that has a dedicated right of way with physical separation, such as grade separation, flexible posts, or on-street parking.

As shown in Figure 4-2, presently there are few classified bikeways near the proposed school site. The San Francisco Bay Trail (Class I bikeway) runs through Menlo Park along Bayfront Expressway (generally on the north side) between Haven Avenue and the Dumbarton Bridge, and a Class II bikeway is present along Chilco Street after leaving the Belle Haven Neighborhood and crossing the Dumbarton Rail Corridor (the City is currently upgrading this bikeway to a Class IV bikeway). Class II bikeways are also present along all or portions of Willow Road, Bay Road, University Avenue, Middlefield Road, and Ringwood Avenue. There are no classified bicycle facilities present in the immediate vicinity of the proposed school site (i.e., along Jefferson Drive or Constitution Drive); however, the City's has plans for a Class II bikeway along Marsh Road and a Class III bikeway along Constitution Drive (City of Menlo Park 2016a).

The City has also prepared a Comprehensive Bicycle Development Plan to provide a blueprint for making bicycling an integral part of daily life in Menlo Park (City of Menlo Park 2005). The City's bicycle plan identifies school-aged bicycle commuters as one of two key bicycle commute groups utilizing the City's bicycle infrastructure. The City's plan acknowledges that commuters typically seek the most direct and fastest route available, although roadways with extremely high traffic volumes, unprotected intersections, and the availability of safe and secure bicycle storage are important factors in determining whether to commute by bicycle and which route to take

when doing so. The City's bicycle plan states that most commuter bicycle trips are under five miles, except for those commuters linking to other modes of transportation such as Caltrain.

4.1.4 Airports

There are no public or private airports in the immediate vicinity of the proposed school site. The closest airport, Palo Alto Airport of Santa Clara, is approximately three and a half miles southeast of the proposed school site at its nearest location.

4.1.5 Site Circulation and Student Loading / Unloading

Access to the proposed Menlo Park Small High School is provided along two driveways on the north and south side of the property frontage on Jefferson Drive. With the proposed driveways and parking layout, vehicles would turn into the project site via the inbound driveway (on the south), travel westbound along the access roadway, and turn right towards the designated drop-off/pick-up area. Once the student is dropped off, vehicles from the drop-off area would circulate (clockwise) around the parking lot towards the site exit (outbound, northern driveway). The perimeter drive aisle and separate loading / unloading lane would provide approximately 480 total linear feet of queue storage capacity within the project site. This queueing capacity could accommodate up to 19 vehicles on site (assuming an average of 25 feet of queue storage per vehicle), including eight vehicles within the student loading and unloading.

4.1.6 Parking

The SUHSD would provide 50 on-site parking spaces, including two Americans with Disabilities Act spaces. On-site parking would be provided along the northern and western drive aisles via 90-degree parking stalls. There is currently approximately 2,400 linear feet of off-street parking provided on Jefferson Drive; however, off-site parking in the vicinity of the proposed Menlo Park Small High School is limited. In January 2016, the Menlo Park City Council approved a no parking zone along most of Constitution Drive and parts of Chrysler Drive. In addition, the City is considered adopting a no parking zone on Jefferson Drive as part of its General Plan update (City of Menlo Park 2016b).

4.2 REGULATORY SETTING

4.2.1 California Code of Regulations

Title 5 of the California Code of Regulations contains standards related to the construction of school facilities[7]. Section 14010 of the code requires school districts to select a school site that:

- Is easily accessible from arterial roads (5 CCR §14010 k);
- Provides for minimum peripheral visibility from planned driveways in accordance with Caltrans standards (5 CCR §14010 k);
- Is not located on major arterial streets with a heavy traffic pattern (5 CCR §14010 l);

[7] In general, pursuant to 5 CCR §14010 u and 5 CCR §14030 r, the governing board of a school district may request the State Superintendent of Public Schools grant an exemption school siting, design, and construction standards if the school district can demonstrate site specific circumstances or alternative standards would not compromise the safe and supportive nature of the school environment nor the educational appropriateness of the school design.

- Is located within the proposed attendance area to encourage student walking and avoid extensive bussing (5 CCR §14010 l).

Section 14030 of the code sets standards for the design and construction of school facilities, including:

- Parent drop off and parking shall be separated to allow students to enter and exit the school grounds safely[8] (5 CCR §14030 b), specifically:
    - Vehicle traffic patterns do not interfere with foot traffic patterns;
    - Parking stalls are not located so vehicles must back into bus or loading areas used by parents;
    - Island fencing or curbs are used to separate parking areas from loading/unloading areas;
- Delivery and utility areas shall be located to provide vehicular access that does not jeopardize the safety of students and staff (5 CCR §14030 d).

4.2.2 Senate Bill 743 / California Environmental Quality Act

Senate Bill 743 requires the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines (14 CCR §15000 et seq.) to develop alternative methods of measuring transportation impacts under CEQA. At a minimum, the new methods must apply within areas that are served by transit; however, OPR may extend the new methods statewide. Once the new transportation guidelines are adopted by OPR, automobile delay may no longer be considered to be an environmental impact under CEQA for some projects.

4.2.3 California Department of Transportation

The California Department of Transportation (Caltrans) has jurisdiction over state highway facilities. The state is divided into 12 districts; San Mateo County is located in Caltrans District 4. Caltrans requires that a traffic impact study be conducted for a project if it:

- Generates over 100 peak-hour trips on a state highway facility;
- Generates 50 to 100 peak-hour trips on a state highway facility experiencing noticeable delay, approaching unstable traffic flow conditions, (Level of Service (LOS) C or D conditions);
- Generates 1 to 49 peak-hour trips on a state highway facility experiencing significant delay and unstable traffic flow conditions (LOS E or F conditions), or that significantly increases the potential risk for a traffic accident, or that changes local circulation networks that impact a state highway facility (Caltrans 2002)

4.2.4 City/County Association of Governments of San Mateo County

The City/County Association of Governments (C/CAG) of San Mateo County, as the Congestion Management Agency for San Mateo County, is required to prepare and adopt a Congestion Management Program (CMP) on a biennial basis. The purpose of the CMP is to identify strategies to respond to future transportation needs, develop procedures to alleviate and control

[8] Pursuant to 5 CCR §14030 b, parent drop off, bus loading, and parking areas shall be separated unless such site layout features are unavailable due to limited acreage in urban areas or restrictive locations.

congestion, and promote countywide solutions. The 2013 CMP, which was developed to be consistent with Metropolitan Transportation Commission's Transportation 2035 Plan, provides updated program information and performance monitoring results for the CMP roadway system.

4.2.5 City of Menlo Park General Plan

The City of Menlo Park's General Plan Land Use and Circulation Element identifies various policies to promote walking, safe use of bicycle travel, and use of public transit as alternate modes of transportation, including:

- The City shall promote improved public transit service and increased transit ridership, especially to office and industrial areas and schools (Policy II-B-3).
- The City will consider working with school districts to encourage alternatives to single occupancy vehicle use, such as carpools and vanpools, for trips being generated by local schools (Policy II-C-3).
- The City shall prepare a safe school route program to enhance the safety of school children who walk to school (Policy II-E-6).

4.2.6 City of Menlo Park Sidewalk Master Plan and Comprehensive Bicycle Plan

The City's Sidewalk Master Plan provides a guideline for the allocation of capital, maintenance, administration, and matching funds for sidewalk facilities. The primary purpose of the plan is to prioritize sidewalk installation by providing an inventory of existing gaps in the City's sidewalk network. Priority streets include those roadways that provide network connectivity and access to important pedestrian destinations, such as schools, parks, and the downtown area. The plan recommends public schools implement programs to educate and promote awareness of the rights and responsibilities of pedestrians, bicyclists, and motorists and the benefits that come with increased walkability.

4.2.7 City of Menlo Park Comprehensive Bicycle Development Plan

The City of Menlo Park's 2005 Comprehensive Bicycle Development Plan provides a blueprint for a citywide system of bike lanes, bike routes, bike paths, bicycle parking, and other related facilities to allow for safe, efficient and convenient bicycle travel within the City. The purpose of the plan is to enhance and expand the existing bicycle network by connecting gaps, addressing constrained areas, and providing for great local (to community centers, schools, parks, libraries, employment centers, and commercial centers) and regional connectivity. The plan recommends public schools provide secure bike racks and lockers and implement a safe route to school program.

4.3 TRANSPORTATION IMPACT ANALYSIS METHODOLOGY / OVERVIEW

The TIA prepared for the Menlo Park Small High School Project was done so in accordance with the recommended methodologies set forth by the City of Menlo Park, the City/County Association of Governments (C/CAG) of San Mateo County, and Caltrans (Hexagon 2016). This section summarizes the methodology used to evaluate the potential traffic impacts that could occur with implementation of the project. Please refer to Appendix C for a detailed discussion of the methodologies used in the TIA prepared for the project site.

4.3.1 Transportation Impact Analysis Scope

The scope of the TIA, i.e., the intersections and roadway facilities evaluated for potential traffic impacts, was prepared in consultation with the City of Menlo Park. In total, the TIA evaluated

the potential traffic impacts from implementation of the Menlo Park Small High School Project on 11 intersections, 6 roadway segments, 3 CMP roadway segments, and 1 freeway interchange. All of facilities evaluated are located within the City of Menlo Park, but not necessarily under the jurisdiction of the City (e.g., freeway interchanges are subject to Caltrans jurisdiction). The study facilities are shown in Figure 4-1 and listed in Table 4-1 to Table 4-4. The analyses were conducted for the weekday AM peak-hour (typically one hour between 7:00 and 9:00 AM) and the PM peak-hour (typically one hour between 4:00-6:00 PM). Although the school day would be over before 4:00 PM, as a conservative approach, it was assumed that school traffic associated with the end of the day dismissal would be on the roadway during the PM peak hour, providing a worst case evaluation of potential traffic conditions.

Table 4-1 Intersections Evaluated in the Project TIA Report

Study Intersection	Primary Jurisdiction	Intersection Type
1. Bayfront Expressway and Marsh Road	Caltrans / C/CAG	Signalized
2. Constitution Drive and Independence Drive	Menlo Park	2-Way Stop
3. U.S. 101 NB Ramps and Marsh Road	Caltrans	Signalized
4. U.S. 101 SB Ramps and Marsh Road	Caltrans	Signalized
5. Bayfront Expressway and Chrysler Drive	Caltrans / C/CAG	Signalized
6. Constitution Drive and Chrysler Drive	Menlo Park	4-Way Stop
7. Jefferson Drive and Chrysler Drive	Menlo Park	1-Way Stop
8. Independence Drive and Chrysler Drive	Menlo Park	1-Way Stop
9. Constitution Drive and Jefferson Drive	Menlo Park	1-Way Stop
10. Bayfront Expressway and Chilco Street	Caltrans / C/CAG	Signalized
11. Constitution Drive and Chilco Street	Menlo Park	4-Way Stop

Source: Hexagon 2016 (see Appendix C, Figure 1 and Table 5)

Table 4-2 Roadway Segments Evaluated in the Project TIA Report

Roadway Segment	Jurisdiction
1. Jefferson Drive, south of Chrysler Drive	Menlo Park
2. Chrysler Drive, between Jefferson Drive and Constitution Drive	Menlo Park
3. Chrysler Drive, between Constitution Drive and Bayfront Expressway	Menlo Park
4. Independence Drive, north of Chrysler Drive	Menlo Park
5. Constitution Drive, between Jefferson Drive and Chilco Street	Menlo Park
6. Chilco Street, between Constitution Drive and Bayfront Expressway	Menlo Park

Source: Hexagon 2016 (see Appendix C, Table 5)

Table 4-3 Routes of Regional Significance Evaluated in the Project TIA Report

Route of Regional Significance	Jurisdiction
1. U.S. 101, north of Marsh Road	Caltrans / C/CAG
2. U.S. 101, south of Marsh Road	Caltrans / C/CAG

Table 4-3 Routes of Regional Significance Evaluated in the Project TIA Report	
Route of Regional Significance	**Jurisdiction**
3. Bayfront Expressway (SR 84)	Caltrans / C/CAG
Source: Hexagon 2016 (see Appendix C, pg. 4)	

Table 4-4 Freeway Interchanges Evaluated in the Project TIA Report	
Freeway Interchange	**Jurisdiction**
1. U.S. 101 Northbound Off-Ramp to Marsh Road	Caltrans
2. U.S. 101 Northbound On-Ramp from Westbound Marsh Road	Caltrans
3. U.S. 101 Southbound Off-Ramp to Marsh Road	Caltrans
4. U.S. 101 Southbound On-Ramp from Westbound Marsh Road	Caltrans
Source: Hexagon 2016 (see Appendix C, pg. 4)	

4.3.1.1 Level of Service

Level of service (LOS) is a qualitative measure of traffic operations, ranging from LOS A (free-flow conditions) to LOS F (forced-flow conditions). Consistent with the City's Transportation Impact Analysis Guidelines, study intersections (including CMP and state facilities) were evaluated using the VISTRO software and analysis model. Additionally, for consistency with the methodology applied in the intersection analysis for the City's General Plan, the intersection analysis is based on the *Highway Capacity Manual* (HCM) 2000 methodology. The HCM2000 operations method evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. The HCM2000 operations method for unsignalized intersections is applicable for both two-way and all-way stop-controlled intersections. For the analysis of stop-controlled intersections, the HCM2000 methodology evaluates intersection operations on the basis of average control delay time for all vehicles on the stop-controlled approaches. Please refer to Appendix C for additional information LOS methodology and the correlation between average control delay and LOS.

4.3.2 Project Trip Generation

The Institute of Transportation Engineers (ITE) *Trip General Manual*, 9th Edition (2012) contains trip generation rates based on empirical research for a variety of common land uses; however, the ITE manual's rates do not represent the proposed project (a small high school) nor are they specific to the project region[9]. Accordingly, trip generation rates for the project were determined based on trip generation counts conducted at an existing SUHSD small high school – Everest High School – that has similar characteristics to the proposed Menlo Park Small High School, including a similar student capacity (400 students) and attendance boundary (the SUHSD)[10]. The trip generation counts were conducted at the Everest High School on April 9th,

[9] ITE trip generation rates represent a national average and do include site-specific data or regional characteristics. Factors such as school starting and ending times, after school activities, location, and geography all influence the AM to PM peak hour trip rates at any given school site.

[10] Everest High School is located at 445 5th Avenue, in the City of Redwood City, less than 3 miles (driving distance) from the proposed project site. At the time the trip generation counts were performed, Everest High

2015, between the hours of 7:30 to 8:30 AM and 3:00 to 4:00 PM, during the start time and dismissal time, respectively, for the high school. The trip generation counts yield an AM and PM peak hour trip generation rate at Everest High School of 0.88 and 0.51 trips per student, respectively. The corresponding trip generation rates for the proposed Menlo Park Small High School Project are shown in Table 4-5 and Table 4-6.

Table 4-5 Menlo Park Small High School Net Trip Generation (100 Students)

Land Use	AM Trip Rate	AM Peak Hour (7 AM to 9 AM)			PM Trip Rate	PM Peak Hour (4 PM to 6 PM)		
		In	Out	Total		In	Out	Total
Existing (Bay Associates)	0.73(A)	25	7	32	0.73(A)	12	20	32
Proposed Small High School	0.88(B)	50	38	88	0.51(C)	22	29	51
Net Project Trips	--	25	31	56	--	10	9	19

Source: Hexagon 2016 (See Appendix C, Table 21)

(A) Trip generation estimates for the existing Bay Associates facility are based on the ITE *Trip Generation Manual*, 9th Edition (2012) for a manufacturing facility (ITE land use code 140).

(B) Trip generation estimates for the proposed school are based on trip generation counts conducted at Everest High School on April 9, 2015. For comparison purposes, the AM 0.88 trips per student rate derived from Everest High School is approximately double the ITE AM trip generation rate of 0.43 trips per student for a high school land use (ITE land use code 530).

(C) Trip generation estimates for the proposed school are based on trip generation counts conducted at Everest High School on April 9, 2015. For comparison purposes, the PM 0.51 trips per student rate derived from Everest High School is approximately 1.5 times the ITE PM trip generation rate of 0.29 trips per student for a high school land use (ITE land use code 530).

Table 4-6 Menlo Park Small High School Net Trip Generation (400 Students)

Land Use	AM Trip Rate	AM Peak Hour (7 AM to 9 AM)			PM Trip Rate	PM Peak Hour (4 PM to 6 PM)		
		In	Out	Total		In	Out	Total
Existing (Bay Associates)	0.73(A)	25	7	32	0.73(A)	12	20	32
Proposed Small High School	0.88(B)	202	152	354	0.51(C)	91	115	206
Net Project Trips	--	177	145	322	--	79	95	174

Source: Hexagon 2016 (See Appendix C, Table 11)

(A) Trip generation estimates for the existing Bay Associates facility are based on the ITE *Trip Generation Manual*, 9th Edition (2012) for a manufacturing facility (ITE land use code 140).

(B) Trip generation estimates for the proposed school are based on trip generation counts conducted at Everest High School on April 9, 2015. For comparison purposes, the AM 0.88 trips per student rate derived from Everest High School is approximately double the ITE AM trip generation rate of 0.43 trips per student for a high school land use (ITE land use code 530).

(C) Trip generation estimates for the proposed school are based on trip generation counts conducted at Everest High School on April 9, 2015. For comparison purposes, the PM 0.51 trips per student rate derived from Everest High School is approximately 1.5 times the ITE PM trip generation rate of 0.29 trips per student for a high school land use (ITE land use code 530).

School had an enrollment of 391 students. The school is open to students from throughout the District; however, survey data indicates approximately 47 percent of the school enrollment lives within two miles of the school.

4.3.3 Trip Distribution and Assignment

Trip distribution is summarized in Table 4-7. The trip distribution pattern for the proposed school was estimated based on information regarding the existing service area and enrollment characteristics for Everest High School, the proposed service area and expected enrollment characteristics for the new school, existing travel patterns, and the location of complementary land uses in the project area. The net increase in peak hour trips generated by the proposed school was assigned to the roadway system in accordance with this information. The assignment assumes that all traffic associated with the proposed school would be new trips on the roadway network. This is a conservative assumption that is likely to overestimate the traffic impacts attributable to the proposed project because the new school would not result in enrollment growth in the SUHSD. Rather, it would serve the existing demand already that is already occurring within the SUHSD and the approximately 20 elementary and middle schools that feed into the District. Thus, presumably, all students that would attend the new school represent students who currently or soon would attend other SUHSD schools by using the existing transportation network. In addition, students being dropped-off at the school by a parent/family member on their way to work would not be a new trip, but rather an existing trip that detours the proposed school site and then proceeds on to their final destination. Detoured trips would show up as new trips only at intersections off the normal direction of travel, most likely intersections in the immediate vicinity of the project site. Assuming all school trips are new trips may result in double counting of existing trips already on the roadway network (and included in the existing traffic counts); however, there is insufficient information available to ascertain precise travel patterns and routes. For this reason, the TIA conservatively assumed that all project traffic represents new trips at all study intersections. Please refer to Appendix C for additional information on trip distribution and assignment.

Table 4-7 Menlo Park Small High School Trip Distribution

Route / Area (Trips to / from Proposed School)	Trip Distribution Percent
U.S. 101, Southbound	30%
Marsh Road	25%
U.S. 101, Northbound	20%
North Fair Oaks	8%
Bayfront Expressway	7%
Chilco Street	7%
Suburban Park – Lorelei Manor – Flood Park Triangle	3%

Source: Hexagon 2016 (See Appendix C, Figure 8)

4.3.4 Traffic Scenarios Evaluated

The TIA prepared for the Menlo Park Small High School Project evaluated traffic conditions and potential traffic impacts under several different scenarios, including:

- Existing Conditions
- Existing Plus Project Conditions
- Near Term Conditions 2018 (Intersection LOS only)
- Near Term Plus Project Conditions 2018 (100 Students – Intersection LOS only)
- Near Term Conditions (2021)

- Near Term Plus Project Conditions 2021 (400 Students)
- Cumulative Conditions (Year 2025)
- Cumulative Plus Project Conditions

The existing and near term conditions are described below. For the purposes of this EIR, the existing plus project and near term plus project conditions constitute the change to the environment that would occur with implementation of the proposed Menlo Park Small High School Project, and are therefore discussed in 4.4.2. Cumulative and cumulative plus project conditions are described in Chapter 12.

4.3.4.1 Existing Conditions

Existing conditions represent the conditions that most accurately describe the current traffic volumes during the typical weekday AM (7 AM to 9 AM) and PM (4 PM to 6 PM) peak hours in the project area (based on the best available data at the time the TIA was prepared).

Existing intersection lane configurations and traffic volumes were provided by City of Menlo Park staff (lane configurations were also confirmed in the field). Intersection volumes obtained from the City consist of AM and PM peak hour turning movement volumes included in the City's Circulation - Existing Conditions Report (January 2015) which is part of the City's General Plan Update. Local roadway counts were obtained from the Circulation report while counts for state facilities (roadway segments and interchange ramps) were obtained from Caltrans. Refer to Appendix C for traffic count data, existing lane configurations, and existing traffic volumes.

The TIA found that all but one of the study intersections operate at acceptable LOS under existing conditions, as shown in Table 4-8.

Table 4-8 Existing Conditions – Intersection Level of Service

Study Intersection	Jurisdiction	Unacceptable LOS?(A)	
		AM	PM
1. Bayfront Expressway and Marsh Road(B)	C/CAG / State	**Yes**	**Yes**
2. Constitution Drive and Independence Drive	Menlo Park	No	No
3. U.S. 101 NB Ramps and Marsh Road	State	No	No
4. U.S. 101 SB Ramps and Marsh Road	State	No	No
5. Bayfront Expressway and Chrysler Drive	State	No	No
6. Constitution Drive and Chrysler Drive	Menlo Park	No	No
7. Jefferson Drive and Chrysler Drive	Menlo Park	No	No
8. Independence Drive and Chrysler Drive	Menlo Park	No	No
9. Constitution Drive and Jefferson Drive	Menlo Park	No	No
10. Bayfront Expressway and Chilco Street	State	No	No
11. Constitution Drive and Chilco Street	Menlo Park	No	No

Source: Hexagon 2016 (see Appendix C, Table 6)

(A) Bold values indicate the intersection operates at an unacceptable LOS based on applicable LOS policy. Refer to section 4.4.1 for a description of the LOS thresholds at study intersections. The AM, and PM peak hour periods are from 7 AM to 9 AM, and 4 PM to 6 PM, respectively.

(B) CMP intersection.

For roadway segments, the City of Menlo Park, as published in its Circulation System Assessment document, does not designate a roadway as operating acceptably or unacceptably. Instead, the City only considers if a proposed project would contribute to an acceptable or unacceptable level of growth on the roadway. Nonetheless, under existing conditions, all of the study roadway segments carry average daily traffic (ADT) volumes lower than the roadway capacity outlined in the City's General Plan, with the exception of Chrysler Drive, between Jefferson Drive and Constitution Drive (see Table 4-9). This roadway segment has an existing average daily traffic volume of 3,330 vehicles, more than double its capacity (1,500 vehicles).

Table 4-9 Existing Conditions – Roadway Segments (Average Daily Traffic)

Roadway Segment	Classification	Roadway Volume[(A)]	
		Capacity	Existing
1. Jefferson Drive, south of Chrysler Drive	Local	1,500	1,290
2. Chrysler Drive, between Jefferson Drive and Constitution Drive	Local	1,500	**3,300**
3. Chrysler Drive, between Constitution Drive and Bayfront Expressway	Collector	10,000	4,000
4. Independence Drive, north of Chrysler Drive	Local	1,500	1,020
5. Constitution Drive, between Jefferson Drive and Chilco Street	Collector	10,000	2,400
6. Chilco Street, between Constitution Drive and Bayfront Expressway	Collector	10,000	7,000

Source: Hexagon 2016 (see Appendix C, Table 7)
(A) Bold values indicated existing average daily traffic volume exceeds planned capacity.

For routes of regional significance, the TIA found that all directional segments of U.S. 101 and Bayfront Expressway have acceptable LOS under existing conditions (see Appendix C, pg. 26 and Table 8).

For the U.S. 101 / Marsh Road interchange, the TIA found that, based on volume to capacity ratios, the northbound on ramp from westbound Marsh Road operates at substandard level, based on Caltrans standards (See Appendix C, pgs. 28-29 and Table 9).

4.3.4.2 Near Term Conditions

Near term conditions represent the conditions just prior to completion of the proposed project. Traffic volumes for near term conditions are based on volumes from existing traffic counts plus any traffic that would be generated by approved projects within the vicinity of the proposed project, but which have yet not added traffic to the roadway system (and thus are not reflected in existing traffic counts).

As described in section 4.3, the TIA included an evaluation of potential project impacts during the initial year of school operation (Year 1, presumed to be the 2018 – 2019 school year), when enrollment would be approximately 100 students, and at full operation of the school (Year 4, or the 2021-22 school year), when enrollment would be approximately 400 students. Thus, near-term traffic conditions were analyzed for both 2018 (intersection LOS only) and 2021 (intersection LOS, roadway segments, regional routes of significance, and freeway interchanges).

Information on projects approved but not constructed was obtained from the City of Menlo Park. In addition, a one percent annual growth factor was applied to existing traffic counts when determining near term conditions (see Appendix C, pgs. pgs. 43-45 and Table 16). The SUHSD notes that although several near term traffic improvements are planned in the study area, none were assumed to be in place as part of the near-term analysis, which provides a more conservative evaluation of potential project impacts (i.e., likely to overestimate potential impacts).

Near Term Conditions 2018

The TIA found all 11 study intersections would operate at an unacceptable LOS during the AM and/or PM peak hour under near term 2018 conditions, as shown in Table 4-10.

Table 4-10 Near Term 2018 Conditions – Intersection Level of Service

Study Intersection	Jurisdiction	Unacceptable LOS?(A)	
		AM	PM
1. Bayfront Expressway and Marsh Road(B)	C/CAG / State	**Yes**	**Yes**
2. Constitution Drive and Independence Drive	Menlo Park	**Yes**	No
3. U.S. 101 NB Ramps and Marsh Road	State	**Yes**	**Yes**
4. U.S. 101 SB Ramps and Marsh Road	State	**Yes**	**Yes**
5. Bayfront Expressway and Chrysler Drive	State	**Yes**	**Yes**
6. Constitution Drive and Chrysler Drive	Menlo Park	**Yes**	**Yes**
7. Jefferson Drive and Chrysler Drive	Menlo Park	No	**Yes**
8. Independence Drive and Chrysler Drive	Menlo Park	No	**Yes**
9. Constitution Drive and Jefferson Drive	Menlo Park	No	**Yes**
10. Bayfront Expressway and Chilco Street	State	**Yes**	**Yes**
11. Constitution Drive and Chilco Street	Menlo Park	**Yes**	**Yes**

Source: Hexagon 2016 (see Appendix C, Table 17)

(A) Bold values indicate the intersection operates at an unacceptable LOS based on applicable LOS policy. Refer to Section 4.4.1 for a description of the LOS thresholds at study intersections. The AM, and PM peak hour periods are from 7 AM to 9 AM, and 4 PM to 6 PM, respectively.

(B) CMP intersection.

Near Term Conditions 2021

Similar to the 2018 scenario, the TIA found all 11 intersections would operate at an unacceptable LOS during the AM and/or PM peak hour under near term 2021 conditions, as shown in Table 4-11.

Table 4-11 Near Term 2021 Conditions – Intersection Level of Service			
Study Intersection	**Jurisdiction**	**Unacceptable LOS?(A)**	
		AM	**PM**
1. Bayfront Expressway and Marsh Road(B)	C/CAG / State	**Yes**	**Yes**
2. Constitution Drive and Independence Drive	Menlo Park	**Yes**	No
3. U.S. 101 NB Ramps and Marsh Road	State	**Yes**	**Yes**
4. U.S. 101 SB Ramps and Marsh Road	State	**Yes**	**Yes**
5. Bayfront Expressway and Chrysler Drive	State	**Yes**	**Yes**
6. Constitution Drive and Chrysler Drive	Menlo Park	**Yes**	**Yes**
7. Jefferson Drive and Chrysler Drive	Menlo Park	No	**Yes**
8. Independence Drive and Chrysler Drive	Menlo Park	No	**Yes**
9. Constitution Drive and Jefferson Drive	Menlo Park	No	**Yes**
10. Bayfront Expressway and Chilco Street	State	**Yes**	**Yes**
11. Constitution Drive and Chilco Street	Menlo Park	**Yes**	**Yes**

Source: Hexagon 2016 (see Appendix C, Table 17)

(C) Bold values indicate the intersection operates at an unacceptable LOS based on applicable LOS policy. Refer to section 4.4.1 for a description of the LOS thresholds at study intersections. The AM, and PM peak hour periods are from 7 AM to 9 AM, and 4 PM to 6 PM, respectively.

(D) CMP intersection.

For roadway segments, the TIA found four of the six study roadway segments would carry traffic volumes above their classified capacity under near term 2018 conditions, as shown in Table 4-12.

Table 4-12 Near Term 2018 Conditions – Roadway Segments (Average Daily Traffic)			
Roadway Segment	**Classification**	**Roadway Volume(A)**	
		Capacity	**2021**
1. Jefferson Drive, south of Chrysler Drive	Local	1,500	**2,330**
2. Chrysler Drive, between Jefferson Drive and Constitution Drive	Local	1,500	**8,370**
3. Chrysler Drive, between Constitution Drive and Bayfront Expressway	Collector	10,000	**13,670**
4. Independence Drive, north of Chrysler Drive	Local	1,500	**5,740**
5. Constitution Drive, between Jefferson Drive and Chilco Street	Collector	10,000	5,410
6. Chilco Street, between Constitution Drive and Bayfront Expressway	Collector	10,000	8,990

Source: Hexagon 2016 (see Appendix C, Table 18)

(A) Bold values indicated existing average daily traffic volume exceeds planned capacity.

For routes of regional significance, the TIA found that most directional segments of U.S. 101 and Bayfront Expressway would operate at acceptable LOS under near term conditions; however, the northbound segment of Bayfront Expressway, between Willow Road to U.S. 101, would operate at unacceptable LOS during the AM peak hour under near term 2018 conditions (see Appendix C, pgs. 50 to 51 and Table 19).

For the U.S. 101 / Marsh Road interchange, the TIA found that, based on volume to capacity ratios, the northbound and southbound on ramps from westbound Marsh Road would operate at substandard levels, based on Caltrans standards (see Appendix C, pg. 52 and Table 20).

4.4 PROJECT IMPACTS AND MITIGATION MEASURES

Consistent with CEQA and the CEQA Guidelines, Appendix G, this EIR focuses on the potentially significant direct and indirect impacts that could result from implementation of the Menlo Park Small High School Project, as described in Chapter 2. The SUHSD has determined that, based on the characteristics of the project and the environmental conditions described in Section 4.1, the proposed Menlo Park Small High School Project:

- Does not have the potential to result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. The nearest airport to the proposed project site is the Palo Alto Airport of Santa Clara County, approximately 3.5 miles southeast of the project site, and the proposed project would not involve the construction of structures that could pose a risk to air travel and navigation. The proposed three-story high school is in an area undergoing redevelopment that will have other structures as tall as and taller than the proposed school.
- Does not have the potential to result in inadequate emergency access because the SUHSD has and would continue to coordinate with the City of Menlo Park Fire Marshall on fire access issues (see section 2.3.2.1).

For these reasons, these issues are not discussed further in this EIR. The potentially significant impacts that could result from implementation of the proposed project are described in section 4.4.1 below.

4.4.1 Thresholds of Significance

Based on CEQA Guidelines Appendix G, the proposed project would have a significant environmental impact related to transportation if it would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, ways and freeways, pedestrian and bicycle paths and mass transit;
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or ways;
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities; or
- Substantially increase design hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

In evaluating whether the implementation of the Menlo Park Small High School Project would have a significant impact on the effectiveness and performance of the circulation system, the SUHSD has applied the standards developed by the City of Menlo Park, C/CAG, and Caltrans. These standards are summarized below. Please refer to Appendix C, pages 6 to 14, for more information on the thresholds of significance employed by the City, C/CAG, and Caltrans.

4.4.1.1 Thresholds of Significance for Intersections

The thresholds of significance for intersections depend on the agency with jurisdiction over the intersection, the roadway classification, and whether the intersection is operating at an acceptable or unacceptable LOS.

City of Menlo Park Intersections on Local and Collector Streets

The City considers acceptable LOS for intersections on local and collector streets to be LOS C or better. The City considers an impact at an intersection on a local and collector street operating at acceptable LOS A, B, or C to occur when:

- The addition of project traffic causes the intersection to operate at unacceptable LOS D, E, or F or to have an increase of 23 seconds or greater in average vehicle delay, whichever comes first.

The City considers an impact at an intersection on a local and collector street operating at unacceptable LOS D, E, or F to occur when:

- The addition of project traffic causes an increase of more than 0.8 seconds of average delay to vehicles on all critical movements at the intersection.

City of Menlo Park Intersections on Arterial Streets / Local Approaches to State Facilities

The City considers acceptable LOS for arterial streets and local approaches to state-controlled, signalized intersections to be LOS D or better. The City considers an impact at an intersection on an arterial street or at a local approach to a state facility operating at acceptable LOS A, B, C, D to occur when:

- The addition of project traffic causes the intersection or local approach to operate at unacceptable LOS E or F or to have an increase of 23 seconds or greater in average vehicle delay, whichever comes first.

The City considers an impact at an intersection on an arterial street or local approach operating at unacceptable LOS E or F to occur when:

- The addition of project traffic causes an increase of more than 0.8 seconds of average delay to vehicles on all critical movements at the intersection.

CMP Intersections

C/CAG considers acceptable LOS for the Bayfront Expressway / Marsh Road intersection to be LOS E; however, since the intersection is located within the City of Menlo Park, it is also subject to the City's standards. Thus, for the purposes of this EIR, the acceptable LOS for CMP intersections is the City's standard for arterial and state-controlled intersections, which is LOS D or better. The criteria for evaluating impacts are also the same as that set forth for the City's arterial streets / local approaches to state facilities described above.

Caltrans Intersections

Caltrans considers acceptable LOS intersections to be LOS C or better; however, Caltrans acknowledges that a LOS C standard may not be feasible, particularly for urban environments where the right-of-way is constrained and traffic levels are high. For this reason, if maintaining a LOS C is not feasible, Caltrans attempts to maintain the existing LOS when assessing the impact of a new project. For the purposes of this EIR, the acceptable LOS for Caltrans intersections is the City's standard for state-controlled intersections, which is LOS D or better.

Caltrans considers an impact at a state intersection to occur when:

- The addition of project traffic causes the intersection to degrade from acceptable LOS C or better to unacceptable LOS D or worse or results in an increase of four seconds or more in the intersections average control delay.

4.4.1.2 Thresholds of Significance for Roadway Segments

The City of Menlo Park does not assign an acceptable or unacceptable designation to the existing operation of roadway segments. Instead, the City only considers if a proposed project would contribute to an acceptable or unacceptable level of growth on the roadway. For the purposes of this EIR, the proposed Menlo Park Small High School Project would have a significant impact on roadway segments in Menlo Park if the incremental increase in traffic volumes that could occur with implementation of the project would result in average ADT volumes higher than the traffic capacity of the roadway segment, as follows:

- On local streets, a traffic impact may be considered potentially significant if: 1) the existing ADT is greater than 1,350 (90% of capacity), and there is a net increase of 25 trips or more in ADT due to the project; (2) the ADT is greater than 750 (50% of capacity) but less than 1,350, and project-related traffic increases the ADT by 12.5% or the ADT becomes 1,350; or (3) the ADT is less than 750, and project-related traffic increases the ADT by 25%.
- On collector streets, a traffic impact may be considered potentially significant if: 1) the existing ADT is greater than 9,000 (90% of capacity), and there is a net increase of 50 trips or more in ADT due to project implementation; (2) the ADT is greater than 5,000 (50% of capacity) but less than 9,000, and project-related traffic increases the ADT by 12.5% or the ADT becomes 9,000 or more; or (3) the ADT is less than 5,000, and project-related traffic increases the ADT by 25%.
- On minor arterial streets, a traffic impact may be considered potentially significant if: 1) the existing ADT is greater than 18,000 (90% of capacity), and there is a net increase of 100 trips as a result of project implementation; (2) the existing ADT is greater than 10,000 (50% of capacity) but less than 18,000, and project-related traffic increases the ADT by 12.5% or the ADT becomes 18,000 or more; or (3) the existing ADT is less than 10,000, and project-related traffic increases the ADT by 25%.

4.4.1.3 Thresholds of Significance for Routes of Regional Significance

Level of service standards for Routes of Regional Significance are established by the C/CAG and published in the 2015 CMP Monitoring Report. The standards vary according to the roadways classification. U.S. 101 freeway segments have a standard of LOS F while the Bayfront Expressway arterial segment has a standard of LOS D. For arterial segments (Bayfront Expressway), the proposed project is considered to result in a significant impact if the addition of project traffic causes the segment's volume to capacity ratio to increase by one percent or more. For freeway segments, the proposed project is considered to result in a significant impact if the addition of project traffic would cause the freeway segment to operate at an LOS that violates the standard in the current CMP, or add traffic demand equal to one percent or more the segment capacity, or cause the segment's volume to capacity to increase by one percent or more.

4.4.1.4 Thresholds of Significance for Freeway Interchange

Caltrans identifies a level of service standard C for their facilities, including freeway interchanges. Caltrans considers an impact to a freeway interchange to occur when:

- The addition of project traffic causes the interchange to degrade from an acceptable LOS C or better to an unacceptable LOS D or worse or the result in the addition of trips to an interchange ramp that is already operating at unacceptable LOS.

4.4.2 Potential Impacts from Increased Traffic

Implementation of the Menlo Park Small High School Project would result in additional vehicle trips on the roadways and intersections used to access the proposed school site.

Impact TRA-1: The Menlo Park Small High School Project would add peak hour and daily trips to the circulation and transportation system in the vicinity of the school site.

As shown in Table 4-5 and Table 4-6, the implementation of the Menlo Park Small High School Project would add up to 56 AM peak hour trips and 19 PM peak hour trips to the roadway system during its initial year of operation, when enrollment would be approximately 100 students (anticipated to be the 2018-2019 school year), and up to 322 AM peak hour trips and 174 PM peak hour trips to the roadway system at full enrollment (400 students during the 2021-22 school year). The TIA prepared for the project identifies that the addition of these trips would result in potentially significant impacts to 11 intersections (from unacceptable LOS), four roadway segments (from increased traffic that exceeds roadway capacity), one route of regional significance (from an increase in roadway volume to capacity), and two freeway interchanges (from the addition of traffic to an on-ramp already operating at a substandard level) under existing plus project and near-term plus project conditions (2018 and 2021). These impacts are summarized in Table 4-13 to Table 4-16 below. The TIA prepared for the project identifies and recommends several traditional and alternative transportation infrastructure improvements to reduce the project's contribution to potentially significant transportation system impacts (see Appendix C, Table 25). These include:

- Installation of traffic signals at:
  - Constitution Drive and Chrysler Drive (study intersection 6)
  - Jefferson Drive and Chrysler Drive (study intersection 7)
  - Constitution Drive and Chilco Street (study intersection 11)
- Re-striping of existing traffic lanes at:
  - Bayfront Expressway and Marsh Road (study intersection 1)
  - Constitution Drive and Chrysler Drive (study intersection 6)
- Restricting left-turn movements at:
  - Constitution Drive and Independence Drive (study intersection 24)
- Widening roads and travel lanes to increase capacity on:
  - Bayfront Expressway and Marsh Road (study intersection 1)
  - U.S. 101 North/Southbound Ramps and Marsh Road (study intersections 3 and4)
  - Bayfront Expressway and Chrysler Drive (study intersection 5)
  - Constitution Drive and Chrysler Drive (study intersection 6)
  - Independence Drive and Chrysler Drive (study intersection 8)
  - Constitution Drive and Jefferson Drive (study intersection 9)
  - Bayfront Expressway and Chilco Street (study intersection 10)
  - Constitution Drive and Chilco Street (study intersection 11)
  - U.S. 101 and Bayfront Expressway (regional route of significance)
- Providing an increased meter rate at U.S. 101 freeway ramps at Marsh Road
- Addition of Class III bicycle routes on Constitution Drive
- Extension / addition of pedestrian sidewalks on all or parts of:

- Jefferson Drive, Chrysler Drive, Constitution Drive and Chilco Street
- Providing bus service to the proposed school

Table 4-13 Summary of Project Impacts – Unacceptable Intersection Level of Service

Scenario / Study Intersection[A]	Jurisdiction	Unacceptable LOS?[B]	
		AM	PM
Existing Plus Project Conditions			
1. Bayfront Expressway and Marsh Road	CMP / State	**Yes[B]**	**Yes[B]**
2. Constitution Drive and Independence Drive	Menlo Park	**Yes**	No
3. U.S. 101 NB Ramps and Marsh Road	State	No	**Yes**
4. U.S. 101 SB Ramps and Marsh Road	State	**Yes**	No
11. Constitution Drive and Chilco Street	Menlo Park	No	**Yes**
Near-Term Plus Project Conditions (2018)			
1. Bayfront Expressway and Marsh Road	CMP / State	**Yes[B]**	Yes[B]
2. Constitution Drive and Independence Drive	Menlo Park	**Yes[B]**	No
3. U.S. 101 NB Ramps and Marsh Road	State	**Yes[B]**	**Yes[B]**
4. U.S. 101 SB Ramps and Marsh Road	State	**Yes[B]**	Yes[B]
5. Bayfront Expressway and Chrysler Drive	State	No	**Yes[B]**
6. Constitution Drive and Chrysler Drive	Menlo Park	**Yes[B]**	**Yes[B]**
7. Jefferson Drive and Chrysler Drive	Menlo Park	No	**Yes[B]**
10. Bayfront Expressway and Chilco Street	State	Yes[B]	**Yes[B]**
11. Constitution Drive and Chilco Street	Menlo Park	**Yes[B]**	**Yes[B]**
Near-Term Plus Project Conditions (2021)			
1. Bayfront Expressway and Marsh Road[B]	CMP / State	**Yes[B]**	**Yes[B]**
2. Constitution Drive and Independence Drive	Menlo Park	**Yes[B]**	No
3. US-101 NB Ramps and Marsh Road	State	**Yes[B]**	**Yes[B]**
4. US-101 SB Ramps and Marsh Road	State	**Yes[B]**	**Yes[B]**
5. Bayfront Expressway and Chrysler Drive	State	No	**Yes[B]**
6. Constitution Drive and Chrysler Drive	Menlo Park	**Yes[B]**	**Yes[B]**
7. Jefferson Drive and Chrysler Drive	Menlo Park	No	**Yes[B]**
8. Independence Drive and Chrysler Drive	Menlo Park	No	**Yes[B]**
9. Constitution Drive and Jefferson Drive	Menlo Park	No	**Yes[B]**
10. Bayfront Expressway and Chilco Street	State	Yes[B]	**Yes[B]**
11. Constitution Drive and Chilco Street	Menlo Park	**Yes[B]**	**Yes[B]**

Source: Hexagon (see Appendix C, Tables 16, 22 and Table 23)

(A) This table summarizes the project's contribution to unacceptable LOS impacts identified in the project TIA (Appendix C to this EIR). Intersections that are not potentially significantly impacted are not included in this table. For example, study intersections 5 to 10 are omitted from the Existing Plus Project summary because the TIA does not identify potentially significant impacts at these intersections from project implementation.

(B) A "No" indicates the intersection would operate at an acceptable LOS with and without project traffic. A "Yes" indicates the intersection would operate at an unacceptable LOS with and without project traffic, but the project would not contribute significantly to this condition. A bold "Yes" indicates the project contributes to a potentially significant impact because the addition of project-related traffic would cause an intersection to exceed the applicable intersection impact criteria listed in Section 4.4.1.1 (e.g., degrade an intersection from an acceptable to an unacceptable LOS or add traffic that exceeds other applicable standards, such as a volume to capacity threshold).

(C) This intersection would operate at an unacceptable LOS without the addition of project traffic to the peak hour time period.

Table 4-14 Summary of Project Impacts - Increased Traffic on Roadway Segments (ADT)			
Scenario / Study Roadway Segment	**Road Class**	**Road Volume**	
		No Project (A)	**Plus Project(B)**
Existing Plus Project Conditions			
1. Jefferson Drive, south of Chrysler Drive	Local	1,290	**1,678**
2. Chrysler Drive, between Jefferson Drive and Constitution Drive	Local	**3,300**	**3,650**
3. Chrysler Drive, between Constitution Drive and Bayfront Expressway	Collector	4,000	4,311
4. Independence Drive, north of Chrysler Drive	Local	1,020	1,059
5. Constitution Drive, between Jefferson Drive and Chilco Street	Collector	2,400	2,460
6. Chilco Street, between Constitution Drive and Bayfront Expressway	Collector	7,000	7,028
Near-Term Plus Project Conditions (2021)			
7. Jefferson Drive, south of Chrysler Drive	Local	**2,330**	**2,718**
8. Chrysler Drive, between Jefferson Drive and Constitution Drive	Local	**8,370**	**8,720**
9. Chrysler Drive, between Constitution Drive and Bayfront Expressway	Collector	**13,670**	**13,981**
10. Independence Drive, north of Chrysler Drive	Local	**5,740**	**5,779**
11. Constitution Drive, between Jefferson Drive and Chilco Street	Collector	5,410	5,470
12. Chilco Street, between Constitution Drive and Bayfront Expressway	Collector	8,990	9,018

Source: Hexagon 2016 (see Appendix C, Table 13 and Table 26)

(A) A bold value indicates the roadway volume exceeds the road class capacity listed in Table 4-9.

(B) A bold value indicates the project would contribute to a potentially significant impact because the addition of project-related traffic would exceed road segment impact criteria listed in Section 4.4.1.2.

Table 4-15 Summary of Project Impacts – Regional Routes of Significance(A)		
Scenario / Route	**AM Peak Hour LOS and V/C**	
	No Project	**Plus Project**
Existing Plus Project Conditions		
None	--	--
Near-Term Plus Project Conditions (2021)		
Bayfront Expressway, between Willow Road and U.S. 101	**E** / (0.913)	**E / (0.951)**

Source: Hexagon 2016 (see Appendix C, pg. 40 and Table 27)

(A) Bold values indicated a potentially significant impact because the addition of project traffic would cause or contribute to unacceptable impact criteria listed in Section 4.4.1.3.

Table 4-16 Summary of Project Impacts – U.S. 101 Freeway Interchanges		
Scenario / Route	**Peak Hour LOS and V/C(A)**	
	No Project	**Plus Project**
Existing Plus Project Conditions		
Northbound On-Ramp from Westbound Marsh Road		**--**
AM Peak Hour	**F / 1.820**	**F/ 1.857**
PM Peak Hour	**D / 0.854**	**D / 0.877**
Near-Term Plus Project Conditions (2021)		
Northbound On-Ramp from Westbound Marsh Road		
AM Peak Hour	**F / 1.865**	**F / 1.902**
PM Peak Hour	**E / 0.996**	**F / 1.019**
Northbound On-Ramp from Westbound Marsh Road		
PM Peak Hour	**D / 0.879**	**E / 0.900**

Source: Hexagon 2016 (see Appendix C, Table 15 and Table 28)
(A) Bold values indicated a potentially significant impact because the addition of project traffic would cause or contribute to unacceptable impact criteria listed in Section 4.4.1.4.

As explained in the TIA, the recommended improvements would have varying degrees of feasibility and effectiveness (see Appendix C, Table 25). The TIA acknowledges some recommended improvements that could reduce potential impacts to a less than significant level are infeasible because they would require right-of-way acquisition, encroachment to private property, utility relocation, roadway widening, and/or improvements above and beyond what is expected of any single project. But, in general, the TIA considers infrastructure improvements that do not require roadway widening to be potentially feasible measures that could be undertaken by the City or other appropriate agency, such as installing traffic signals, re-striping or converting existing travel lanes, and adding bike lanes where none currently exist. As explained in the TIA, nearly all of the infrastructure improvements recommended for the proposed project have been recommended for other projects in the immediate vicinity, such as the Facebook Campus project, the Menlo Gateway Project, and Commonwealth Corporate Center project. The exception is improvements to the intersection of Constitution Drive and Jefferson Drive, which are specific to the proposed Menlo Park Small High School Project (the TIA recommends a separate northbound turn lane onto Constitution Drive at this intersection).

The TIA notes that the District does not have the jurisdiction or authority to implement improvements for the local and state intersections and roadways potentially affected by traffic stemming from the proposed project. As such, the TIA recommends the District work with the appropriate jurisdictional entity (e.g., the City of Menlo Park) to implement these potentially feasible improvements and contribute a fair share of the cost of the improvement. The City's Traffic Impact Fee Program is intended to help fund transportation improvements in the City. Fees are based on the amount of PM peak hour vehicle trips generated by a particular land use and are collected prior to the issuance of a building permit, which the proposed project does not require. For example, office land use is charged $4.63 per trip per square foot, whereas a single family residential land use is charged $3,139.49 per trip per unit. School land uses do not have a pre-defined fee and could be charged as much as $3,107.87 per PM peak hour trip. Based on the net increase in PM peak hour vehicle trips that could result from the project (19 to 174 trips, see Table 4-5 and **Error! Reference source not found.**), potential fees for the project could range from approximately $59,000 to $541,000, although the City has discretion to lower fees for certain facilities and the improvements that reduce transportation impacts (City of Menlo Park 2016c).

The District, as CEQA Lead Agency, has reviewed this TIA recommendation and has determined that contributing a fair share of the cost for improvements for traffic signals, re-striping, reconfiguring, or re-converting exiting travel lanes, widening roads and travel lands, and developing alternative transportation infrastructure is inappropriate and infeasible for the following reasons:

- The proposed Menlo Park Small High School is anticipated to be in session from approximately 8:15 AM to 3:45 PM. The 3:45 PM end of school day is outside the traditional PM peak hour time period (4 PM to 6 PM). Even though the SUHSD has conservatively assumed that all project traffic would occur during the PM peak hour period, this is unlikely to be the case.
- Students would come to the Menlo Park Small High School from feeder and other SUHSD high schools throughout the SUHSD attendance boundary. The increase in student enrollment forecast to occur within the SUHSD is in large part due to increased enrollment in these feeder schools. Thus, to some extent, some or many of the vehicle trips that would be generated by the proposed project are not new vehicle trips, but rather existing trips that are shifted from one school and vicinity to another. These trips may already be impacting the regional intersections and roadway segments evaluated in the TIA.
- The residential land uses where the school-related vehicle trips originate may have already been subject to a developer or traffic impact fee program intended to address transportation impacts. For example, new residential units in Menlo Park would have already been subject to a fee of $3,139.49 per unit.
- The District cannot act as the primary authority to guarantee the timely and successful implementation, effectiveness, and monitoring of any infrastructure improvement funded through a cost-sharing program.

For these reasons, funding roadway improvements, even on a cost-sharing basis, is not considered to be an effective mitigation measure for potential impacts identified in the TIA. Rather, the District considers attempts to directly control and reduce vehicle trips generated by the proposed project to be a more effective and feasible mitigation measure than traffic signals or other roadway improvements. Accordingly, to reduce the vehicle trips generated by the proposed Menlo Park Small High School Project, the SUHSD shall implement Mitigation Measures TRA-1A, TRA-1B, and TRA-1C below.

Mitigation Measure TRA-1A: Prepare and Implement a Travel Demand Management Program for Menlo Park Small High School Students, Faculty, and Staff

By the 2021-2022 school year, the Menlo Park Small High school shall prepare and implement a formal, written Travel Demand Management (TDM) Program for the Menlo Park Small High School that covers school students, faculty, and staff. As part of its program, the school shall designate a central TDM coordinator to oversee the TDM Program and monitor the program's effectiveness. The school shall, at a minimum, evaluate the following TDM measures for inclusion in its written TDM Program:

- On-site vehicle parking permits (either free or fee-based)
- Preferential and/or free/reduced cost parking for carpools
- Adequate, secure bicycle parking
- Organized school-wide walk and bike to school day, week, etc.
- Promotions and activities to incentivize alternative modes of transportation (e.g., competitions to see which grade level avoids the most vehicle trips)

- Use of a web- or mobile-based application to connect students wishing to carpool,
- Use of incentives such as prizes and certificates for students who participate in walk / bike to school programs
- Notice / awareness of TDM measures in the school media materials (e.g., website, newsletter, etc.)
- Other measures deemed feasible and appropriate for the school, such as a late start time for the school

The TDM Program shall set as its goal a 30 percent mode split for combined student, faculty, and staff transit, pedestrian, bicycle, and carpool trips. The central TDM coordinator shall be responsible for surveying school students, faculty, and staff once each year (preferably in the first quarter) to ascertain the most current transportation mode split at the school and the effectiveness of the TDM Program (in accordance with Mitigation Measure TRA-1B).

Mitigation Measure TRA-1B: Conduct Menlo Park Small High School Travel Mode Survey

Beginning with the 2021-2022 school year, the Menlo Park Small High School shall contract with a qualified transportation planning firm to conduct a student, faculty, and staff travel survey. School staff shall administer the updated survey once per year over a minimum two-day period. The survey shall focus on student, faculty, and staff travel modes, vehicle occupancies, and time of travel to school in the morning and from school in the afternoon. The survey results shall be tabulated to assess current trip generation by mode, time-of-day, and grade or faculty/staff level and used to ascertain the effectiveness of the school's Travel Demand Management Program.

Mitigation Measure TRA-1C: Evaluate the feasibility of SamTrans bus / shuttle service

The District shall evaluate the feasibility of establishing a dedicated SamTrans bus route or shuttle service for the Menlo Park Small High School.

- By December 31, 2019, the SUHSD shall re-initiate contact with SamTrans regarding dedicated bus or shuttle service for the Menlo Park Small High School.
- By December 31, 2020, the SUHSD shall complete an evaluation of the technical, economic, and demographic factors that affect the feasibility of dedicated SamTrans bus or shuttle service for the Menlo Park Small High School.
- If the SUHSD and SamTrans determine dedicated bus or shuttle service is feasible, the SUHSD shall initiate the service as soon as possible, with the goal to provide service by the start of the 2021-2022 school year.
- If it is determined that such service is not feasible, the evaluation shall consider if, when, and how the obstacles that make such service infeasible should be re-evaluated (e.g., student enrollment is too low and needs to be higher, there is insufficient student density along potential bus routes, etc.).

Mitigation Measures TRA-1A, TRA-1B, and TRA-1C would require the SUHSD and/or the Menlo Park Small High School to take steps to avoid and/or reduce vehicle trips generated by school students, faculty, and staff; however, the reduction in vehicle trips would not fully offset project trips, and some measures may yield no trip reductions if they are found not be feasible for the school. As such, these measures may not fully reduce the potentially significant impacts on the intersections, roadway segments, regional routes of significance, and freeway interchanges

listed in Table 4-13, Table 4-14, and Table 4-15. Impact TRA-1, therefore, is considered a significant and unavoidable impact of the project.

Impact TRA-2: The Menlo Park Small High School Project could cause or contribute to conflicts and/or dangerous interactions between pedestrians, bicyclists, and vehicles.

Once operational, the proposed Menlo Park Small High School would result in high school-aged students (9^{th} – 12^{th} grade) walking, bicycling, or driving to and from the school, especially during AM (7 AM to 9 AM) and PM peak hour (4 PM to 6 PM) time periods. Regardless of the travel mode, all trips would likely take the most direct route possible to Jefferson Drive and would converge on the proposed school site.

The addition of vehicles, bicycles, and pedestrians to the existing roadway system, which generally lacks continuous pedestrian and bicycle facilities in the vicinity of the school, could cause or contribute to conflicts and/or dangerous interactions between vehicles and pedestrians, vehicles and bicyclists, and/or pedestrians and bicyclists (e.g., injuries, accidents, "near-misses" etc.). This would be most likely to occur on roadways that have high traffic volumes (e.g., Marsh Road) or which lack dedicated pedestrian and bicycle facilities. In addition, during student drop-off and pick-up periods, the streets adjacent to the proposed Menlo Park Small High School, in particular Jefferson Drive, Constitution Drive, Independence Drive, and Chrysler Drive, would experience a temporary and periodic surge in traffic flow. This could result in vehicle queuing to enter or exit the campus and lead to improper and/or illegal student loading and unloading in the middle of the roadways (i.e., not at an intersection, crosswalk, or other designated pedestrian facility) or at or near adjacent businesses and their associated parking lots (e.g., L3 Randtron, at 138 Jefferson Drive). These impacts are difficult to evaluate because the potential for such impacts to occur is contingent on specific intersection conditions and roadway volumes that would fluctuate daily and change over time, as well as the behaviors and attitudes of individual pedestrians, bicyclists, and motorists using the roadway system; however, a general discussion of these potential risks is provided below.

As described in 4.1.3, although pedestrian and bicycle facilities are present in the project area, they cross high volume roadways (e.g., Marsh Road and Bayfront Expressway) and other barriers (e.g., Dumbarton Rail Corridor) that pose bottlenecks and other potential points of conflict. In addition, large segments of Chilco Street, Constitution Drive, and Independence Drive lack demarcated pedestrian and bicycle facilities, meaning students walking or bicycling to the school would do so on the road shoulder or within the roadway travel lane. This would reduce travel lane capacity for other motorists and emergency vehicles, cause pedestrians and bicyclists to travel in areas where motorists may not be accustomed to seeing them, and may cause students accessing the school to cross roadways in inappropriate locations. Therefore, it is reasonable to presume that the development of a small high school in an area that lacks full pedestrian and bicycle connectivity to the broader region it would serve could result in conflicts between pedestrians, bicyclists, and vehicles unless the SUSHD proactively engages incoming students on the need to develop safe travel habits and use designated facilities.

The potential for student drop-off and pick-up periods to lead improper and/or illegal student loading and unloading or at or near adjacent businesses and their associated parking lots is considered low. The TIA prepared for the project has concluded the site layout (see Figure 2-6) provides sufficient access, on-site circulation, and queueing capacity such that off-site vehicle queues would be minimized. As described in section 2.3.2, the SUHSD is proposing a one-way circulation pattern in which all vehicles enter the site via the southern driveway, follow the

perimeter drive aisle to the student loading and unloading area in front of the school's main entrance, and then exit the site via the northern driveway. The perimeter drive aisle and separate loading / unloading lane would provide approximately 480 total linear feet of queue storage capacity would be provided within the project site. This queueing capacity could accommodate up to 19 vehicles on site (assuming an average of 25 feet of queue storage per vehicle), including eight vehicles within the student loading and unloading lane at any given point. If each student drop-off and pick-up takes approximately one minute, the site layout is capable of accommodating approximately 240 vehicles during a half-hour period (8 vehicles per minute x 30 minutes = 240 vehicles). Using Poisson's probability and assuming a steady stream of inbound traffic, the average queue length for Menlo Park Small High School would, at full operation (i.e., 400 students) be equal to the total inbound peak hour vehicle trips (202; see Table 4-6) divided by the estimated service rate (240 vehicles per half hour), or approximately 1 vehicle in the AM peak hour, given the above assumptions. The maximum queue length would be approximately twice the average, or two queued vehicles beyond the drop-off area. Furthermore, even if all student loading and unloading activity were to occur within a 15-minute period, the estimated average and maximum queue length extending beyond the drop-off area would be approximately two and four vehicles, respectively. This queue length is much less than the total site capacity (estimated to be 19 vehicles) and thus the SUHSD anticipates that off-site queueing and student loading and unloading would be minimal.

The potential conflicts related to safe student travel and site ingress/egress, although difficult to quantify exactly, are considered potentially significant impacts of the proposed project. To reduce the potential for the project to increase conflicts by and between pedestrians, bicyclists, and vehicles, the SUHSD shall implement Mitigation Measures TRA-2A, TRA-2B, and TRA-2C below.

Mitigation Measure TRA-2A: Safe Routes to School

The Menlo Park Small High School, in coordination with the City of Menlo Park, shall prepare a Safe Routes to School Map that identifies facilities such as traffic lights, crosswalks, and demarcated bikeways that promote safe routes to school. The Menlo Park Small High School shall provide this map to parents and students via school newsletter or other materials (e.g., Back-to-School Night presentation) at least once a year and shall maintain an electronic copy of the map on the school's website at all times. The school shall also provide the map the City of Menlo Park Transportation Division.

Mitigation Measure TRA-2B: Reduce Off-Campus Student Loading and Unloading

The Menlo Park Small High School shall prepare and implement a formal, written policy outlining student loading and unloading procedures for the school. The policy shall:

- Describe the student loading and unloading areas at the school
- Contain a map depicting student loading and unloading areas
- Explicitly describe that off-campus student loading and unloading at adjacent businesses and on adjacent roadways is admonished and discouraged by the school

The school shall distribute this policy to each incoming freshman and sophomore at the beginning of the school year (the policy may be included in the Student Handbook), and shall also publish the policy in school newsletters and/or other materials at least once a year. As part of this policy, school staff shall, upon receipt of a complaint regarding off-

campus student loading and unloading, strive to identify and dissuade the individual responsible for the off-campus loading or unloading from repeating their activity.

Mitigation Measure TRA-2C: Participate in City of Menlo Park's Bayfront Transportation Management Association

The SUHSD shall coordinate with appropriate stakeholders (such as the City of Menlo Park, SamTrans, and local businesses) if and when the City of Menlo Park establishes its Bayfront Transportation Management Association to assess and recommend changes to signage, pedestrian facilities, and other solutions that address pedestrian and bicycle safety concerns and improve traffic circulation in the Bayfront Area.

Mitigation Measures TRA-2A, TRA-2B, and TRA-2C would, over time, promote and encourage safe student travel and proper student loading and unloading procedures at the Menlo Park Small High School, thereby reducing potential conflicts between pedestrians, bicycles, and vehicles to the maximum extent feasible. In addition, Mitigation Measures TRA-1A, TRA-1B, and TRA-1C would reduce vehicle trips generated by the Menlo Park Small High School, which may also reduce the potential conflicts described above. Thus, with the implementation of these measures, impact TRA-2 would be rendered a less than significant impact.

Impact TRA-3: The Menlo Park Small High School could result in result in indirect environmental effects resulting from a parking shortage.

The proposed Menlo Park Small High School is located in the City's Bayfront Area, which currently consists primarily of general industrial lands (zoned M2 by the City). Although the City has adopted off-street parking requirements for M2 Districts, it does not have parking requirements specific to schools. For this reason, the TIA prepared for the project estimated parking demand for the proposed school based on information available from ITE as well as surveys of parking demand at two similarly-sized SUHSD schools – Everest High School and East Palo Alto High School.

The ITE parking generation rates for high school land uses are equal to 0.09 parking spaces per student. Based on the ITE rate, the proposed project would need to provide approximately 71 parking spaces (36 for students and 35 for staff/faculty members) at build-out. Parking availability at Everest High School and East Palo Alto High School is higher, equal to 0.16 and 0.17 parking spaces per student, and these schools report the existing parking supply is sufficient to serve students and staff[11]. Assuming a parking generation rate of 0.17 spaces per student, it is estimated that at full capacity, the Menlo Park Small High School could require up to 74 parking spaces (for both students and staff). If the rate were applied only to students, the project could require up to 103 students (68 for students and 35 for staff).

As described in Section 4.1.6, the proposed site plan includes 50 parking spaces oriented along the site's northern and western perimeter. Thus, the proposed school may not provide sufficient on-site parking for the proposed student enrollment and staff; the estimated deficiency could be between 21 to 53 spaces. In addition, although there is currently off-site parking available on Jefferson Drive, the City is considering prohibiting parking on Jefferson Drive in the near future.

[11] At the time of the survey, Everest High School had 381 students and 23 staff and a total of 72 on- and off-site parking spaces, while East Palo Alto High School had 317 students and 30 staff and a total of 50 parking spaces on site.

The potential indirect environmental effects associated with this parking deficit could include air quality and noise emissions (from vehicles spending time searching for a parking spot), water quality effects (e.g., oil leaks from vehicles), and traffic impacts (vehicle passing through an intersection multiple times searching for a parking spot). To reduce the potential for parking deficits would lead to potentially significant indirect effects, the SUHSD shall implement Mitigation Measures TRA-3A, TRA-3B, and TRA-3C below.

Mitigation Measure TRA-3A: Maximize On-Site Parking

The SUHSD shall maximize on-site parking at the Menlo Park Small High School site. This may be accomplished by designing the eastern perimeter of the site to accommodate daily parking for students/staff or short-term parking for visitors (outside of school drop-off and pick-up periods).

Mitigation Measure TRA-3B: Identify Off-Campus Parking Areas

The Menlo Park Small High School shall engage local businesses and other land uses in the Bayfront Area to identify underutilized or vacant parking areas that could be used by school staff and/or students during times when school is in session. Once areas have been identified, the school shall prepare and implement a formal, written off-campus policy outlining areas where staff and students can find available off-campus parking. The policy shall discourage parking in areas where the school has not reached an agreements and/or understanding the appropriate entity. The school shall also publish the location of off-campus parking areas in school newsletters and/or other materials at least once a year.

Mitigation Measure TRA-3C: Coordinate with the City on Parking Prohibitions

The Menlo Park Small High School shall coordinate with the City of Menlo Park on parking prohibitions on Jefferson Drive. The goal of this coordination shall be to permit temporary, short-term, school-related parking that can be used for visitors, parent-teacher conferences, etc.

Mitigation Measures TRA-3A, TRA-3B, and TRA-3C would minimize indirect environmental effects associated with potential parking deficits at the Menlo Park Small High School by maximizing on-site parking opportunities, informing and directing students of available off-campus parking areas, and making short-term, on-street parking available for visitors, thereby reducing the time spent searching for parking. In addition, Mitigation Measures TRA-1A, TRA-1B, and TRA-1C would reduce vehicle trips generated by the school, which would also reduce potential indirect effects associated with potential parking deficits at the Menlo Park Small High School. Thus, with the implementation of these measures, Impact TRA-3 would be rendered a less than significant impact.

4.5 REFERENCES

City of Menlo Park 2005. *City of Menlo Park Comprehensive Bicycle Development Plan.* Prepared by Alta Planning and Design for the City of Menlo Park. Menlo Park, CA. January 2005.

_____2009. *City of Menlo Park Sidewalk Master Plan.* Prepared by Dowling Associates for the City of Menlo Park. Menlo Park, CA. January 28, 2009.

_____2016a. *Public Review Draft Environmental Impact Report for the ConnectMenlo General Plan Land Use and Circulation Elements and M2 Area Zoning Updates.* Menlo Park, CA. June 1, 2016.

_____2016b. *Staff Report 16-014-CC Adopt a Resolution to Install No Parking Along Constitution Drive, Independence Drive, and Chrysler Drive between Independence Drive and Commonwealth Drive*. Menlo Park, CA. October 2011.

_____2016c. *Staff Report 16-014-CC Adopt a Resolution to Install No Parking Along Constitution Drive, Independence Drive, and Chrysler Drive between Independence Drive and Commonwealth Drive*. Menlo Park, CA. October 2011.

_____2016d. *Transportation Impact Fee City of Menlo Park*. Menlo Park, CA. July 1, 2015.

Hexagon Transportation Consultants, Inc. (Hexagon) 2016. *Menlo Park Small High School Project Traffic Impact Analysis.* Gilroy, CA. May 25, 2016.

San Mateo County Transit District (SamTrans) 2015. Letter from Eric Harris, Manager, SamTrans Operations Division, to Matthew Zito, Chief Facilities Officer, SUHSD. April 8, 2015.

CHAPTER 5 AIR QUALITY

5.1 ENVIRONMENTAL SETTING

Air quality is a function of pollutant emissions and topographic and meteorological influences. The physical features and atmospheric conditions of a landscape interact to affect the movement and dispersion of pollutants and determine its air quality.

5.1.1 Project Air Basin

The U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) are the federal and state agencies charged with maintaining air quality in the nation and state, respectively. The U.S. EPA delegates much of its authority over air quality to CARB. CARB has geographically divided the state into 15 air basins for the purposes of managing air quality on a regional basis. An air basin is a CARB-designated management unit with similar meteorological and geographic conditions. There are 15 air basins in the state. The Menlo Park Small High School Project is located in the City of Menlo Park, in southern San Mateo County, within the San Francisco Bay Area Air Basin (SFBAAB). Comprised of nine different counties, the SFBAAB area includes all of Alameda, Contra Costa, Marin, Napa, Santa Clara, San Mateo, and San Francisco counties, and portions of Solano and Sonoma County. Menlo Park Small High School is situated in the southwest portion of the SFBAAB, within the Santa Clara Valley.

5.1.2 San Francisco Bay Area Air Basin Topography and Meteorology

The topography and meteorology of the SFBAAB are characterized by the coast mountain ranges and the seasonal migration of the Pacific high-pressure cell. Regionally, basin airflow is affected by the coast mountain ranges, which create complex terrains consisting of higher elevations, valleys, and bays. The Golden Gate to the west and the Carquinez Strait to the east create gaps in the mountain ranges that allow air to flow into and out of the SFBAAB. In the summer, winds from the northwest are channeled through the Golden Gate and other narrow openings, resulting in localized areas of high wind speeds. Air flowing from the coast inland is called the sea breeze and begins developing in the late morning or early afternoon; air flowing from the inland regions back to the coast, or drainage, occurs at night.

Basin climate is also influenced by the Pacific high-pressure cell, a semi-permanent area of high pressure located over the Pacific Ocean. In the summer, the cell is centered over the northeastern Pacific Ocean, pushing storms to the north and resulting in generally stable conditions within the Bay Area. In the winter the cell weakens and migrates south, bringing cooler temperatures and stormy conditions. Wintertime inversions are weaker and more localized and are the result of rapid heat radiation from the earth's surface.

The SFBAAB is most susceptible to air pollution during the summer when cool marine air flowing through the Golden Gate can become trapped under a layer of warmer air (known as an inversion) and prevented from escaping the valleys and bays created by the Coast Ranges. Air pollution potential is highest along the southeastern portion of the peninsula because this area is most protected from the high winds and fog of the marine layer, the emission density is relatively high, and pollutant transport from upwind sites is possible.

5.1.3 San Francisco Bay Area Air Basin Air Quality Conditions

The federal and state governments have established emissions standards and limits for air pollutants which may reasonably be anticipated to endanger public health or welfare. These standards typically take one of two forms: standards or requirements that are applicable to

specific types of facilities or equipment (e.g., petroleum refining, metal smelting), or concentration-based standards that are applicable to overall ambient air quality. Air quality conditions are best described and understood in the context of these standards; areas that meet, or attain, concentration-based ambient air quality standards are considered to have levels of pollutants in the ambient air that, based on the latest scientific knowledge, do not endanger public health or welfare.

5.1.3.1 SFBAAB Attainment Status and Emissions Summary

The U.S. EPA has established National Ambient Air Quality Standards (NAAQS) for six common air pollutants: ozone (O_3), particulate matter (PM), which consists of "inhalable coarse" PM (particles between 2.5 and 10 microns in diameter, or PM_{10}) and "fine" PM (particles 2.5 microns in diameter and smaller, or $PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead. The U.S. EPA refers to these six common pollutants as "criteria" pollutants because the agency regulates the pollutants on the basis of human health and/or environmentally-based criteria.

CARB has established California Ambient Air Quality Standards (CAAQS) for the six common air pollutants regulated by the federal Clean Air Act (the CAAQS are more stringent than the NAAQS), plus the following pollutants: hydrogen sulfide (H_2S), sulfates (SO_X), vinyl chloride, and visibility reducing particles.

A description of the air pollutants associated with the proposed project and its vicinity is provided below. Air pollutants not commonly associated with existing or proposed sources in the vicinity of Menlo Park Small High School, such as visibility reducing particles, are not described below.

- **Ground-level Ozone**, or smog, is not emitted directly into the atmosphere. It is created from chemical reactions between oxides of nitrogen (NOx) and volatile organic compounds (VOCs), also called reactive organic gases (ROG), in the presence of sunlight (U.S.EPA 2014a, 2014b). Thus, ozone formation is typically highest on hot sunny days in urban areas with NO_X and ROG pollution. Ozone irritates the nose, throat, and air pathways and can cause or aggravate shortness of breath, coughing, asthma attacks, and lung diseases such as emphysema and bronchitis.
- **Particulate Matter**, also known as particle pollution, is a mixture of extremely small particles and liquid droplets made up of a variety of components such as organic chemicals, metals, and soil and dust particles (U.S. EPA 2013).
    - PM_{10}, also known as inhalable coarse, respirable, or suspended PM10, consists of particles less than or equal to 10 micrometers in diameter (approximately $1/7^{th}$ the thickness of a human hair). These particles can be inhaled deep into the lungs and possibly enter the blood stream, causing health effects that include, but are not limited to, increased respiratory symptoms (e.g., irritation, coughing), decreased lung capacity, aggravated asthma, irregular heartbeats, heart attacks, and premature death in people with heart or lung disease.
    - $PM_{2.5}$, also known as fine PM, consists of particles less than or equal to 2.5 micrometers in diameter (approximately $1/30^{th}$ the thickness of a human hair). These particles pose an increased risk because they can penetrate the deepest parts of the lung, leading to and exacerbating cardiopulmonary health effects.

- **Carbon Monoxide** is an odorless, colorless gas that is formed by the incomplete combustion of fuels. Motor vehicles are the single largest source of carbon monoxide in the Bay Area. At high concentrations, CO reduces the oxygen-carrying capacity of the blood and can aggravate cardiovascular disease and cause headaches, dizziness, unconsciousness, and even death.
- **Nitrogen Dioxide (NO_2)** is a by-product of combustion. NO_2 is not directly emitted, but is formed through a reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO_2 are collectively referred to as NO_X and are major contributors to ozone formation. NO_2 also contributes to the formation of particulate matter. NO_2 can cause breathing difficulties at high concentrations.
- **Sulfur Dioxide (SO_2)** is one of a group of highly reactive gases known as oxides of sulfur (SOx). Fossil fuel combustion in power plants and industrial facilities are the largest emitters of SO_2. Short-term effects of SO_2 exposure can include adverse respiratory effects such as asthma symptoms. SO_2 and other SOx can react to form PM (U.S. EPA 2015).

In addition to criteria air pollutants, the U.S. EPA and CARB have classified certain pollutants as hazardous air pollutants (HAPs) or toxic air contaminants (TACs), respectively. These pollutants can cause severe health effects at very low concentrations, and many are suspected or confirmed carcinogens. The U.S. EPA has identified 187 HAPs, including such substances as benzene and formaldehyde; CARB also considers particulate emissions from diesel-fueled engines (diesel PM) to be a toxic air contaminant.

- **Diesel PM.** The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Many of the toxic compounds adhere to the particles, and because diesel particles are very small (less than 2.5 microns in diameter), they penetrate deeply into the lungs. The CARB has identified diesel PM as a human carcinogen. Mobile sources, including trucks, buses, automobiles, trains, ships and farm equipment, are the largest source of diesel emissions in the Bay Area.

The U.S. EPA, CARB, and regional air agencies assess the air quality of an area by measuring and monitoring the amount of pollutants in the ambient air and comparing pollutant levels against NAAQS and CAAQS. Based on these comparisons, regions are classified into one of the following categories:

- **Attainment.** A region is "in attainment" if monitoring shows ambient concentrations of a specific pollutant are less than or equal to NAAQS or CAAQS. In addition, an area that has been re-designated from nonattainment to attainment is classified as a "maintenance area" for 10 years to ensure that the air quality improvements are sustained.
- **Nonattainment.** If the NAAQS or CAAQS are exceeded for a pollutant, the region is designated as nonattainment for that pollutant. It is important to note that some NAAQS and CAAQS require multiple exceedances of the standard in order for a region to be classified as nonattainment. Federal and state laws require nonattainment areas to develop strategies, plans, and control measures to reduce pollutant concentrations to levels that meet, or attain, standards
- **Unclassified.** An area is unclassified if the ambient air monitoring data are incomplete and do not support a designation of attainment or nonattainment.

Table 5-1 lists the NAAQS and CAAQS and summarizes the SFBAAB attainment status.

Table 5-1 Ambient Air Quality Standards and SFBAAB Attainment Status

Pollutant	Averaging Time	CAAQS (A)		NAAQS (B)	
		Standard (C)	Attainment Status (D)	Standard (C)	Attainment Status (D)
Ozone	1-Hour	180 µg/m^3	**N**	--	--
	8-Hour	137 µg/m^3	**N**	147 µg/m^3	**N**
PM10	24-Hour	50 µg/m^3	**N**	150 µg/m^3	U
	Annual Average	20 µg/m^3	**N**	--	--
PM2.5	24-Hour	--	--	35 µg/m^3	**N** (E)
	Annual Average	12 µg/m^3	**N**	15 µg/m^3	A
Carbon Monoxide	1-Hour	23,000 µg/m^3	A	40,000 µg/m^3	A
	8-Hour	10,000 µg/m^3	A	10,000 µg/m^3	A
Nitrogen Dioxide	1-Hour	339 µg/m^3	A	188 µg/m^3	U[7]
	Annual Average	57 µg/m^3	--	100 µg/m^3	A
Sulfur Dioxide	1-Hour	655 µg/m^3	A	196 µg/m^3	U[8]
	24-Hour	105 µg/m^3	A	--	--
Sulfates	24-Hour	25 µg/m^3	A	--	--

Sources: BAAQMD 2015; modified by MIG|TRA, 2015.

(A) Table does not list CAAQS for lead and visibility reducing particles. California standards for ozone, carbon monoxide, sulfur dioxide (1 and 24-hour), nitrogen dioxide, suspended PM10 and PM2.5 are values that are not to be exceeded. The standards for sulfates, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded.

(B) Standards shown are the primary NAAQS designed to protect public health.

(C) All standards shown in terms of micrograms per cubic meter (µg/m^3) for comparison purposes.

(D) A= Attainment, N= Nonattainment, U=Unclassifiable.

(E) In January 2013, the U.S. EPA issued a final rule to determine the Bay Area attains the 24-hour PM2.5 NAAQS; however, the region will continue to be designated as "non-attainment" for the national 24-hour PM2.5 NAAQS until the BAAQMD submits a re-designation request and a maintenance plan to EPA for EPA review and approval.

5.1.4 Existing Stationary Sources and Risks

The proposed school site is currently developed with an approximately 44,000 square-foot office / warehouse building with associated parking and landscaping. The existing office / warehouse building does not contain any stationary sources of emissions, but does generate vehicle trips that produce emissions from fuel combustion.

The SUSHD has prepared an operational Health Risk Assessment (HRA) for the project to evaluate the potential carcinogenic and non-carcinogenic health risks posed by existing stationary and mobile sources of emissions near the proposed school site (Cornerstone 2015, see Appendix D). As described below and shown in Table 5-2, this operational HRA identified six stationary and two mobile sources within a quarter-mile of the site; however, the emissions from these facilities do not pose a significant risk to the proposed school site's students, faculty, and staff.

The operational HRA identified six stationary sources within a quarter-mile of the proposed school consisting of industrial or light manufacturing facilities (see Appendix D, Table 1 and

Figure 2). To determine school-based screening cancer risks, the residential-based screening cancer risks for these facilities were adjusted based on the difference in exposure duration between residences (70 years) and schools (4 years)[12]. Screening level risk values were further adjusted based on the distance between the source and site using the BAAQMD's Beta Calculator and diesel engine multiplier tool.

The operational HRA identified mobile sources within a quarter-mile of the proposed school site using the BAAQMD's Highway Screening Analysis tools and the traffic volume linkage tool from the California Environmental Health Tracking Program. Two high volume roadways, which are defined as having annual average daily trips exceeding 10,000 vehicles per day, were identified - U.S. 101 and SR 84 / Bayfront Expressway. Similar to the stationary source analysis described above, the residential-based screening risks for these roadways were adjusted for school-based screening cancer risk based on the difference in exposure duration between residences and schools.

Table 5-2 summarizes the stationary and mobile sources within a quarter-mile of the proposed school site and corresponding student cancer risk, faculty/staff cancer risk, non-carcinogenic hazard, and $PM_{2.5}$ concentrations resulting from these sources.

5.1.5 Air Quality Sensitive Receptors

Some people are more affected by air pollution than others. The BAAQMD defines sensitive receptors as "facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly and people with illnesses. Examples include schools, hospitals and residential areas (BAAQMD 2011)." Heightened sensitivity may be caused by health problems, proximity to the emissions source, and duration of exposure to air pollutants. There are no sensitive receptors within 1,000 feet of the Menlo Park Small High School Campus, except the school itself.

[12] Since the BAAQMD's screening tools are for residential receptors, the screening values need to be adjusted to determine the appropriate cancer risk values for school-based receptors. Lifetime risk values for the student population were adjusted to account for an exposure of 180 days per year for 4 years. In addition, the calculated risk for students is multiplied by age-sensitivity factor of 3 (for children ages 2 to 16) to account for early life sensitivity to pollutant exposures. To assess staff-related risk, exposures were adjusted to account for an employment period of 240 days per year for 25 years. This timeline is considered appropriate for potential workplace exposures established by the Office of Environmental Health Hazard Assessment (OEHHA).

Table 5-2 School Health Risks from Existing Emission Sources

Stationary / Mobile Source	Cancer Risk (per million)		Hazard Index		$PM_{2.5}$ ($\mu g/m^3$)
	Students	Staff	Chronic	Acute	
L-3 Communications Randtron(A)(B)	0.04	0.05	<0.001	0.002	0.001
ECI Painting, Inc.(A)	<0.001	<0.001	0.00	n/a	0.005
Geron(A)(C)	0.03	0.04	<0.001	n/a	0.001
InfoImage(A)(D)	0.31	0.38	0.001	n/a	0.001
City of Menlo Park(A)(E)	0.51	0.62	0.41	0.96	0.00
Latham &Watkins(A)(D)	0.06	0.08	<0.001	n/a	0.004
U.S. Highway 101(F)	1.38	1.70	0.015	0.016	0.15
Bayfront Expressway (SR 84)(F)	0.13	0.16	0.001	0.004	0.02
Total Risk	**2.46**	**3.03**	**0.427**	**0.982**	**0.182**

Source: Cornerstone 2015 (See Appendix D)

(A) BAAQMD Stationary Source Screening Analysis Tool (2012), adjusted for school-based receptors. Note: Acute Hazards Index information not provided by BAAQMD's screening tools for stationary sources. Acute Hazards were determined only for stationary sources which required additional evaluation.

(B) BAAQMD's Beta Calculator 1.3 and Diesel IC Engine Distance Multiplier Tool (2012) were used to determine the screening level health risk values.

(C) Health Risk Screening Analysis information from BAAQMD was used to determine the screening level health risk values.

(D) BAAQMD's Diesel IC Engine Distance Multiplier Tool (2012) was used to adjust the screening level health risk values.

(E) BAAQMD's Beta Calculator 1.3 was used to determine the screening level health risk values.

(F) BAAQMD Highway Screening Analysis Tool for San Mateo County (2011), for first floor receptors (6-feet) and adjusted for school-based receptors. Data are for Link 23 of U.S. Highway 101 and Link 22 of SR84.

5.2 REGULATORY SETTING

5.2.1 Federal and State Clean Air Acts

The federal Clean Air Act, as amended, provides the overarching basis for both federal and state air pollution prevention, control, and regulation. The Act establishes the U.S. EPA's responsibilities for protecting and improving the nation's air quality. The U.S. EPA oversees federal programs for setting air quality standards and designating attainment status, permitting new and modified stationary sources of pollutants, controlling emissions of hazardous air pollutants, and reducing emissions from motor vehicles and other mobile sources. The U.S. EPA also requires that each state prepare and submit an SIP that consists of background information, rules, technical documentation, and agreements that an individual state will use to attain compliance with the NAAQS within federally-imposed deadlines. State and local agencies implement the plans and rules associated with the SIP, but the rules are also federally enforceable.

In addition to being subject to federal requirements, air quality in California is also governed by more stringent regulations under the California Clean Air Act. In California, both the federal and state Clean Air acts are administered by CARB. It sets all air quality standards including emission standards for vehicles, fuels, and consumer goods as well as monitors air quality and sets control measures for toxic air contaminants. CARB oversees the functions of local air

pollution control districts and air quality management districts, which in turn administer air quality activities at the regional level.

5.2.2 CARB In-Use Off-Road Diesel Equipment Program

CARB's In-Use Off-Road Diesel Equipment regulation is intended to reduce emissions of NO_x and PM from off-road diesel vehicles, including construction equipment, operating within California. The regulation imposes limits on idling; requires reporting equipment and engine information and labeling all vehicles reported; restricts adding older vehicles to fleets; and requires fleets to reduce their emissions by retiring, replacing, or repowering older engines or installing exhaust retrofits for PM. The requirements and compliance dates of the off-road regulation vary by fleet size, and large fleets (fleets with more than 5,000 hp) must meet average targets or comply with Best Available Control Technology requirements beginning in 2014. CARB has off-road anti-idling regulations affecting self-propelled diesel-fueled vehicles 25 hp and up. The off-road anti-idling regulations limit idling on applicable equipment to no more than five minutes, unless exempted due to safety, operation, or maintenance requirements.

5.2.3 California Environmental Quality Act Guidelines for Sensitive Receptors

As stated in CEQA Guidelines §15186, special requirements are established for certain school projects, as well as certain projects near schools, to ensure that potential health impacts resulting from exposure to hazardous materials, wastes, and substances will be carefully examined and disclosed. The lead agency is responsible for providing sufficient information regarding safety measures of the proposed project, including an investigation showing the proximity of the project to a freeway or major intersection and its subsequent impact on air quality guidelines, including thresholds for sensitive air quality receptors.

5.2.4 California Education Code

Title 5 of the California Code of Regulations (CCR) contains standards related to the construction of the school facilities. Section 17213 of the code requires school districts to select a school site that demonstrates that facilities with the potential to emit hazardous air pollutants within a quarter-mile radius of the school site will not constitute an actual or potential public health risk to students and staff that will attend the school (5 CCR §17213).

5.2.5 Bay Area Air Quality Management District

The BAAQMD is the agency primarily responsible for maintaining air quality and regulating emissions of criteria and toxic air pollutants within the SFBAAB. The BAAQMD carries out this responsibility by preparing, adopting, and implementing plans, regulations, and rules that are designed to achieve attainment of state and national air quality standards. The BAAQMD currently has 12 regulations containing more than 100 rules that control and limit emissions from sources of pollutants. Table 5-3 summarizes the major BAAQMD rules and regulations that may apply to the proposed project.

Table 5-3 Potentially Applicable BAAQMD Rules and Regulations		
Regulation	**Rule**	**Description**
2 – Permits	1 – General Requirements	Includes criteria for issuance or denial of permits, exemptions, appeals against decisions of the District actions on applications.
2 – Permits	2 – New Source Review	Provides for the review of new and modified sources of pollutants; requires use of Best Available Control Technology and emissions offsets to achieve no net increase in nonattainment pollutants; implements Prevention of Significant Deterioration review for attainment pollutants.
2 – Permits	5 – New Source Review of Toxic Air Contaminants	Provides for the review of new and modified sources of toxic air contaminants; requires use of Best Available Control Technology for sources that have a risk above certain thresholds and limits total project risks to 10.0 in a million cancer risk, 1.0 chronic hazard index, and 1.0 acute hazard index.
6 – Particulate Matter	1 – General Requirements	Limits visible particulate matter emissions.
9 – Inorganic Gaseous Pollutants	7 – NOx Emission and CO from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters	Larger boilers are required to have a District-issued Permit to Operate and subject to subsequent review.
9 – Inorganic Gaseous Pollutants	8 – NOx and CO from Stationary Internal Combustion Engines	Limits emissions of NOX and CO from stationary internal gas combustion engines more than 50 brake horsepower.
11 – Hazardous Pollutants	2 – Asbestos Demolition, Renovation, and Manufacturing	Controls emissions of asbestos to the atmosphere during demolition.
Source: BAAQMD 2014		

5.2.5.1 2010 Clean Air Plan

On September 15, 2010 the BAAQMD adopted its Bay Area 2010 Clean Air Plan. This plan updates the District's 2005 Ozone Strategy, addresses ozone, PM, toxic air contaminants, and greenhouse gas emissions in a single, integrated document, and contains 55 control strategies that describe specific measures and actions that the District and its partners will implement to improve air quality, protect public health, and protect the climate. These measures focus on stationary and area sources, mobile sources, transportation control measures, land use, and energy and climate measures (BAAQMD 2010). The BAAQMD has since initiated the process to update its 2010 Clean Air Plan (BAAQMD 2014b).

5.2.6 City of Menlo Park General Plan

The City of Menlo Park's General Plan Open Space and Conservation Element contains the following policies related to air quality:

- Development in Industrial Areas – Evaluate projects in industrial areas for impacts to air resources in relation to truck traffic, hazardous materials use and production-level manufacturing per CEQA (Policy OSC5.2)

5.3 PROJECT IMPACTS AND MITIGATION MEASURES

Consistent with CEQA and the CEQA Guidelines, this EIR focuses on the potentially significant direct and indirect impacts that could result from implementation of the Menlo Park Small High School Project, as described in Chapter 2. The SUHSD has determined that, based on the characteristics of the project and the environmental conditions described in Section 5.1, the proposed Menlo Park Small High School Project:

- Does not have the potential to expose Menlo Park Small High School students and staff to substantial pollutant concentrations or associated health risks and hazards because the operation HRA prepared for the project has determined emissions from the six stationary sources and two high-volume roadways within ¼ mile of the proposed school would not result in student or staff risks that exceed BAAQMD thresholds of significance (see Table 5-2).
- Does not have the potential to create objectionable odors that could affect a substantial number of people because the proposed school does not contain odor-generating activities and there are not a substantial number of people in the vicinity of the school site (surrounding land uses are industrial / commercial in nature).

The potentially significant impacts that could result from implementation of the Menlo Park Small High School Project are described in Section 5.3.2 below.

5.3.1 Thresholds of Significance

Based on Appendix G of the CEQA Guidelines, the proposed project would have a significant air quality impact if it would:

- Conflict with or obstruct implementation of the applicable air quality plan
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation

In May 2011, the BAAQMD published new *CEQA Air Quality Guidelines* that contain the BAAQMD's recommendations to Lead Agencies for evaluating and assessing the significance of a project's potential air quality impacts (BAAQMD 2011). The BAAQMD's recommended construction- and operational-related thresholds of significance for criteria pollutants and toxic air contaminants are summarized in Table 5-4.

Table 5-4 BAAQMD CEQA Thresholds of Significance			
Pollutant	**BAAQMD Project-Level Threshold of Significance (A)**		
	Construction Emissions	**Operational Emissions**	
	Daily Emissions (lb/day)	**Daily Emissions (lb/day)**	**Annual Emissions (tons per year)**
ROG	54	54	10
NO_X	54	54	10
Exhaust PM10	82	82	15
Exhaust PM2.5	54	54	10
Fugitive Dust PM10/PM2.5	Best Management Practices	*None*	
Local CO	*None*	9.0 ppm (8-hr. avg.), 20.0 ppm (1-hr. avg.)	
Risks and Hazards – New Source/Receptor (Individual)	Compliance with Qualified Community Risk Reduction Plan; or Increased cancer risk of >10.0 in a million; and Increased non-cancer risk of >1.0 Hazard Index (chronic or acute); and Ambient PM2.5 increase: >0.3µg/m^3 annual average		
Risks and Hazards – New Source/Receptor (Cumulative)	Compliance with Qualified Community Risk Reduction Plan; or Increased cancer risk of >100 in a million (from all local sources); and Increased non-cancer risk of >10.0 Hazard Index (from all local sources) (chronic); and Ambient PM2.5 increase: >0.8µg/m^3 annual average (from all local sources)		
Accidental Release of Acutely Hazardous Pollutants	*None*	Storage or use of acutely hazardous materials locating near receptors or receptors locating near stored or used acutely hazardous materials considered significant	
Odors	*None*	Complaint History – 5 confirmed complaints per year averaged over three years	
Source: BAAQMD 2011			

5.3.2 Potential Impacts from Project-Related Emissions of Air Pollutants

Implementation of the Menlo Park Small High School Draft EIR would emit air pollutants during construction activities and vehicle trips associated with the project. These emissions could conflict with an applicable BAAQMD air quality plan, cause or contribute to an existing or projected violation of an air quality standard, expose sensitive receptors to substantial pollutant concentrations, and create objectionable odors.

Impact AIR-1: Implementation of the Menlo Park Small High School Project would generate criteria air pollutant emissions.

The construction and operation of the proposed Menlo Park Small High School Project would generate criteria air pollutant emissions from fuel combustion in heavy-duty construction

equipment, motor vehicles, and area sources such as landscaping equipment, use of cleaning products, etc.

The BAAQMD's CEQA Air Quality Guidelines contain screening criteria to provide lead agencies with a conservative indication of whether a proposed project could result in potentially significant air quality impacts. Consistent with the BAAQMD's guidance, if a project meets all of the screening criteria, then the project would result in a less than significant air quality impact and a detailed air quality assessment in not required for the project. Table 5-5 compares the proposed project against the BAAQMD's construction screening criteria for a high school land use.

Table 5-5 Project Consistency with BAAQMD Screening Criteria

Screening Criterion[A]	Requirement	Project Consistency
1) Land Use Type and Size	Project is below the construction (277,000 square feet / 3,012 students) and operational screening size (311,000 square feet / 2,390 students).[B]	The proposed small high school would be approximately 40,000 square feet in size and support 400 students.
2) Basic Construction Measures	Project design and implementation includes all BAAQMD *Basic Construction Mitigation Measures*	The SUHSD would implement all BAAQMD *Basic Construction Mitigation Measures* into all project-related bid, contract, engineering, and site plan documents (e.g., construction drawings). See Mitigation Measure AIR-1.
3) Demolition	Demolition activities are consistent with BAAQMD Regulation 11, Rule 2: Asbestos Demolition, Renovation, and Manufacturing	The SUHSD is required to comply with this regulation. The SUHSD will include compliance with this regulation in all project-related bid, contract, engineering, and site plan documents (e.g., construction drawings).
4) Construction Phases	Construction does not include simultaneous occurrence of more than two construction phases (e.g., grading, paving, and building construction would occur simultaneously)	The proposed project does not include simultaneous occurrence of more than two construction phases.
5) Multiple Land Uses	Construction does not include simultaneous construction of more than one land use type	The proposed project includes only a school land use.
6) Site Preparation	Construction does not require extensive site preparation	Maximum daily grading would not exceed 0.6 acres.[C]

Table 5-5 Project Consistency with BAAQMD Screening Criteria		
Screening Criterion(A)	**Requirement**	**Project Consistency**
7) Material Transport	Construction does not require extensive material transport and considerable haul truck activity (greater than 10,000 cubic yards).	The project would result in approximately 6,200 cubic yards of total material transport.

Source: BAAQMD 2011, URBEMIS2007 Version 9.2.4; modified by MIG|TRA 2016

(A) BAAQMD Screening Criteria from Table 3-1 of BAAQMD CEQA Guidelines (BAAQMD 2011)
(B) Operational and construction screening level size from Table 3-1 of BAAQMD CEQA Guidelines (BAAQMD 2011)
(C) Maximum site preparation estimate for 2.2 acres high school land use derived using UBERMIS2007 Version 9.2.4

As noted in Table 5-5, for all projects, the BAAQMD recommends implementation of eight "Basic Construction Mitigation Measures" (BAAQMD 2011) to reduce construction fugitive dust emissions levels. These basic measures are also used to meet the District's best management practices (BMPs) threshold of significance for construction fugitive dust emissions (i.e., the implementation of all basic construction measures renders fugitive dust impacts a less than significant impact). Accordingly, the SUSHD would implement AIR-1 below to reduce fugitive dust emissions from construction activities and ensure the proposed project would be consistent with all BAAQMD screening criteria.

Mitigation Measure AIR-1: Reduce Fugitive Dust Emissions

To reduce potential fugitive dust that may be generated by the Menlo Park Small High School Project during building demolition, site preparation, and building construction activities, the District shall implement the following BAAQMD basic construction measures:

- Water all exposed surfaces (e.g., staging areas, soil piles, graded areas, and unpaved access roads) two times per day during construction and adequately wet demolition surfaces to limit visible dust emissions.
- Cover all haul trucks transporting soil, sand, or other loose materials off the project site.
- Use wet power vacuum street sweepers at least once per day to remove all visible mud or dirt track-out onto adjacent public roads (dry power sweeping is prohibited) during construction of the propose project.
- Vehicle speeds on unpaved roads/areas shall not exceed 15 miles per hour.
- Complete all areas to be paved as soon as possible and lay building pads as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time of diesel powered construction equipment to five minutes and post signs reminding workers of this idling restriction at access points and equipment staging areas during construction of the proposed project.
- Maintain and properly tune all construction equipment in accordance with manufacturer's specifications and have a CARB-certified visible emissions evaluator check equipment prior to use at the site.
- Post a publicly visible sign with the name and telephone number of the construction contractor and SUHSD staff person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The publicly visible sign

shall also include the contact phone number for the Bay Area Air Quality Management District to ensure compliance with applicable regulations.

Mitigation Measure AIR-1 requires the SUHSD to implement measures to control and reduce fugitive dust to less than significant levels, in accordance with BAAQMD CEQA guidelines. Furthermore, the implementation of the project would not conflict with or obstruct implementation of BAAQMD's 2010 Clean Air Plan. The 2010 Clean Air Plan includes criteria air pollutant emissions from construction, mobile, and stationary source activities in its emission inventories and plans for achieving attainment of air quality standards. The BAAQMD's 2010 Clean Air Plan also contains 55 control strategies grouped into five categories: Stationary Source Measures, Transportation Control Measures, Mobile Source Measures, Land Use and Local Impact Measures, and Energy and Climate Measures. Most of these control strategies do not apply or are implemented at the local and regional level by municipal government and the BAAQMD; however, the SUSHD has incorporated Mitigation Measures TRA-1A (Prepare and Implement a Travel Demand Management Program for Menlo Park Small High School Students, Faculty, and Staff), TRA-1B (Conduct Menlo Park Small High School Travel Mode Survey), and TRA-1C (Evaluate the feasibility of Sam Trans Bus / Shuttle Service) to reduce vehicle trips in a manner consistent with the BAAQMD's 2010 Clean Air Plan. With the implementation of these measures, Impact AIR-1 would be rendered a less than significant impact.

5.4 REFERENCES

Bay Area Air Quality Management District (BAAQMD) 2010. "2010 Clean Air Plan." *2010 Clean Air Plan*. BAAQMD, Planning Rules, and Research Division, Plans. October 16, 2014. Web. Accessed March 18, 2016. < http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2010-clean-air-plan/cap-volume-i-appendices.pdf?la=en >

_____2011. *California Environmental Quality Act Air Quality Guidelines*. San Francisco, Ca. June 2010, updated May 2011. Accessed March 18, 2016. <http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines%20May%202011.ashx?la=en>

_____2014a. "Rules and Regulations." *Rules and Regulations.* BAAQMD, Planning, Rules, and Research Division, April 7, 2014. Web. Accessed March 18, 2016. <http://hank.baaqmd.gov/dst/regulations/>

_____2014b. "Clean Air Plan Update." *Clean Air Plan Update*. BAAQMD, Planning Rules, and Research Division, Plans. April 4, 2014. Web. Accessed March 18, 2016. <http://www.baaqmd.gov/plans-and-climate/air-quality-plans/plans-under-development>

_____2015. "Air Quality Standards and Attainment Status." *Air Quality Standards*. BAAQMD, Planning, Rules, and Research Division, Emission Inventory and Air Quality Related. April 22, 2015. Web. Accessed March 18, 2016. <http://hank.baaqmd.gov/pln/air_quality/ambient_air_quality.htm>

California Air Resources Board (CARB) 2005. *Air Quality and Land Use Handbook: A Community Perspective.* Sacramento, CA. April 2005.

Cornerstone Earth Group. 2015. "150 Jefferson Drive Menlo Park California." Project No. 166-14-5. April 27, 2015. Health Risk Assessment. New School Site in Menlo Park for Sequoia Union High School District. Prepared by Placeworks. April 2015.

United States Environmental Protection Agency (USEPA) 2013. "Particulate Matter (PM)." *Particulate Matter.* U.S. EPA, Science and Technology [Air], National Ambient Air Quality Standards, Six Principal Pollutants. March 18, 2013. Web. March 18, 2016. <http://www.epa.gov/airquality/particlepollution/>

_____2014a. "Basic Information." *Basic Information.* U.S. EPA, Science and Technology [Air], National Ambient Air Quality Standards, Six Principal Pollutants, Ozone. November 26, 2014. Web. Accessed March 18, 2016. <https://www.epa.gov/ozone-pollution>

_____2014b. "Health." *Health.* U.S. EPA, Science and Technology [Air], National Ambient Air Quality Standards, Six Principal Pollutants, Particulate Matter. May 6, 2014. Web. Accessed March 18, 2016. <http://www.epa.gov/airquality/particlepollution/health.html>

_____2015. "Sulfur Dioxide." *Sulfur Dioxide.* U.S. EPA, Science and Technology [Air], National Ambient Air Quality Standards, Six Principal Pollutants. March 27, 2015. Web. Accessed March 18, 2016. <http://www.epa.gov/airquality/sulfurdioxide/>

CHAPTER 6 BIOLOGICAL RESOURCES

This chapter describes the biological resources that occur or have the potential to occur at the proposed Menlo Park High School site and summarizes the applicable regulations and policies that govern biological resources. This chapter also evaluates the project's potential adverse effects on these resources and identifies mitigation measures to avoid potential impacts. The evaluation of the project's potential effects on biological resources is based on two reconnaissance-level biological surveys of the site conducted by a qualified biologist (in March and September of 2015), a search of the California Natural Diversity Database (CNDDB), which included all USGS 7.5-minute quadrangles encompassing the project site and the adjacent USGS quadrangles around the site, and a search of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants database.

6.1 ENVIRONMENTAL SETTING

The proposed school site (150 Jefferson Drive) is an approximately 2.1-acre site currently developed with an approximately 44,000 square-foot building, a parking lot, and landscaping. The site is surrounded by commercial and warehouse properties on Constitution Drive (north of the site), Independence Drive and Chrysler Drive (west of the site), and Commonwealth Drive (south of the site). The existing industrial / warehouse area is bordered by major roadways including Bayfront Expressway (State Route 84) on the north, the Dumbarton rail corridor on the east, U.S. Highway 101 on the south, and Marsh Road on the west.

There are no vernal pools, marshes, or other wetlands at or immediately adjacent to the Menlo Park Small High School Site, nor is there any riparian habitat or other sensitive natural community[13]. The project site is located 0.25 miles southwest of diked baylands and 1.25 miles southwest of the San Francisco Bay. The closest natural terrestrial habitat to the site is approximately three miles away and consists of tidal marsh and other coastal habitats associated with San Francisco Bay.

6.1.1 Site Vegetation / Habitat

Vegetation at the site is limited to ornamental trees, shrubs, and herbs on the property frontage along Jefferson Drive, along the northern border of the property, and along the southern border of the site.

There are 48 total trees at the site of four inches diameter at breast height (dbh) or greater, including eleven blue gum eucalyptus trees (*Eucalyptus globulus*), six sweetgums (*Liquidambar styraciflua*), four coast redwoods (*Seqouia sempervirens*), three firethorns (*Pyracantha* sp.), two olive trees (*Olea europea*), two maples (*Acer* sp.), two pepper trees (*Schinus* sp.), two acacias (*Acacia* sp.), one southern magnolia (*Magnolia grandiflora*), one Monterey pine (*Pinus radiata*), one privet (Ligustrum sp.), one palm tree (unknown species), one coast live oak (*Quercus agrifolia*), and twelve trees representing eight unknown species. The trees range from 4.3 to approximately 100 inches dbh, and 7 of the 48 trees at the site are 15 inches dbh or greater and thus qualify as heritage trees under the Menlo Park Heritage Tree Ordinance (see section 6.2.7); however, one of these trees is deceased and therefore poses a safety risk (LPA 2016a, 2016b).

[13] Sensitive natural communities include riparian habitat and other vegetation communities identified in local or regional plans, policies, or regulations, or designated by the U.S. Fish and Wildlife Service or the California Department of Fish and Wildlife.

Shrubs on the site include oleander (*Nerium oleander*) bordering the south and front (east side) of the site and shrubs in the boxfood family (Buxaceae) on the front (east side). Herbaceous vegetation includes English ivy (*Hedera helix*) under the trees on the southern side of the property and a variety of ornamental grasses, sedges and herbs on the property frontage (east side).

6.1.2 Site Wildlife

The quality of the potential wildlife habitat at the proposed school site and adjacent lands is limited due to the dense urban nature of the site and its surroundings. Wildlife in the project area is limited to species commonly found in urban areas. Bird species known from the project area include native and non-native species such as bushtit (*Psaltriparus minimus*), Brewer's blackbird (*Euphagus cyanocephalus*), European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), American crow (*Corvus brachyrhynchos*), house finch (*Carpodacus mexicanus*), rock pigeon (*Columba livia*), and western scrub-jay (*Aphelocoma californica*), among others. The urban nature of the area likely precludes nesting raptors, although they may pass through the area. Raptors that occur in the project region include sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperii*), red-shouldered hawk (*Buteo lineatus*) and red-tailed hawk (*Buteo jamaicensis*). Mammal species in the project area likely include the non-native eastern fox squirrel (*Sciurus niger*), non-native mice and rats, raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*) and striped skunk (*Mephitis mephitis*). Common bat species such as myotis (*Myotis* spp.) may occur in the project area but bat roosts may be precluded from the site due to the high degree of human disturbance. Reptiles and amphibians are also unlikely to occur in the immediate project area.

6.1.3 Special-Status Species

A special-status species is defined as a species meeting one or more of the following criteria:

- Listed, proposed for listing, or candidate for possible future listing as threatened or endangered under the Federal Endangered Species Act (FESA, 50 CFR §17.12)
- Listed or candidates for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA, Fish and Game Code §2050 et seq.).
- Listed as rare under the California Native Plant Protection Act (Fish and Game Code §1900 et seq.).
- Listed as a Fully Protected Species (Fish and Game Code §§3511, 4700, 5050, and 5515)
- Listed as a CSSC on California Department of Fish and Wildlife's[14] (CDFW) Special Animals list
- Plant species considered by CNPS and CDFW to be "rare, threatened, or endangered in California" (Ranks 1A, 1B, and 2)

MIG conducted a search of the CNDDB and CNPS Rare Plant Inventory for special-status species occurrences within the USGS Palo Alto Quadrangle (where the project is located) and eight surrounding quads. Based on these searches, 48 special-status plants and 30 special-status animals occur in the project region (see Appendix E).

[14] As of January 1, 2013, the California Department of Fish and Game (CDFG) was renamed the California Department of Fish and Wildlife. When this document cites reports prepared by the Department prior to 2013, the reference includes the prior department name of CDFG. Both CDFW and CDFG mean the same agency.

The project site is in an urban area and is developed with an existing building, parking lot and landscaping. Habitat for special-status species is non-existent. None of the special-status plant or animal species that occur in the region have the potential to occur on or near the project site based on a lack of suitable habitat and distance from known occurrences of these species.

6.2 REGULATORY SETTING

6.2.1 Federal Endangered Species Act (FESA)

The FESA establishes a broad public and federal interest in identifying, protecting, and providing for the recovery of threatened or endangered species. The Secretary of the Interior and the Secretary of Commerce are designated in FESA as responsible for identifying endangered and threatened species and their critical habitat, carrying out programs for the conservation of these species, and rendering opinions regarding the impact of proposed federal actions on listed species. The USFWS and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) are charged with implementing and enforcing FESA. USFWS has authority over terrestrial and continental aquatic species, and NOAA Fisheries has authority over species that spend all or part of their life cycle at sea, such as salmonids.

Section 9 of FESA prohibits the unlawful "take" of any listed fish or wildlife species. Take, as defined by FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such action." The USFWS's regulations define harm to mean "an act which actually kills or injures wildlife." Such an act may include "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR § 17.3). Take can be permitted under FESA under Sections 7 and 10. Section 7 provides a process for take permits for federal projects or projects subject to a federal permit, and Section 10 provides a process for incidental take permits for projects without a federal nexus. FESA does not extend the take prohibition to federally listed plants on non-federal land, other than prohibiting the removal, damage, or destruction of such species in violation of state law.

6.2.2 Migratory Bird Treaty Act (MBTA)

Under the MBTA, it is unlawful to "pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not." Under the MBTA it is thus illegal to disturb a nest of a migratory species that is in active use, since this could result in killing a bird or destroying an egg. The USFWS oversees implementation of the MBTA.

6.2.3 California Endangered Species Act (CESA)

The CESA, administered by CDFW, protects wildlife and plants listed as "threatened" or "endangered" by the California Fish and Game Commission, as well as species identified as candidates for listing. CESA restricts all persons from taking listed species except under certain circumstances. The state definition of take is similar to the federal definition, except that CESA does not prohibit indirect harm to listed species by way of habitat modification or harassment. Under CESA, an action must have a direct, demonstrable detrimental effect on individuals of the species.

CDFW maintains lists of animal species of special concern (CSSC) that serve as "watch list" species. A CSSC is not subject to the take prohibitions of CESA. The CSSC are species that are

declining at a rate that could result in listing under the FESA or CESA and/or have historically occurred in low numbers, and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals and is intended to focus attention on the species to help avert the need for costly listing under federal and state endangered species laws. This designation is also intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them.

6.2.4 California Fish and Game Code

The California Fish and Game Code protects a variety of species, separate from the protection afforded under CESA. The following specific statutes afford some limits on take of named species: Section 3503 (nests or eggs), 3503.5 (raptors and their nests and eggs), 3505 (egrets, osprey, and other specified birds), 3508 (game birds), 3511 (fully protected birds), 4700 (fully protected mammals), 4800 et seq. (mountain lions), 5050 (fully protected reptiles and amphibians), and 5515 (fully protected fish).

Section 3503 simply states, "it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." The exceptions generally apply to species that are causing economic hardship to an industry. Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted." Section 3505 prohibits taking, selling, or purchasing egrets, osprey, and other named species or any part of such birds.

Fully Protected Species may not be taken or possessed except for scientific research. Four Sections of the Fish and Game Code list 37 fully protected species (Fish and Game Code § 3511, 4700, 5050, and 5515).

Pursuant to Fish and Game Code section 4150, "[a]ll mammals occurring naturally in California which are not game mammals, fully protected mammals, or fur-bearing mammals, are nongame mammals. Nongame mammals or parts thereof may not be taken or possessed except as provided in this code or in accordance with regulations adopted by the commission." This provision could apply to bats which could be found on the project site.

6.2.5 California Native Plant Protection Act (CNPPA)

The CNPPA of 1977 preserves, protects, and enhances endangered and rare plants in California by specifically prohibiting the importation, take, possession, or sale of any native plant designated by the California Fish and Game Commission as rare or endangered, except under specific circumstances identified in the CNPPA. Various activities are exempt from the CNPPA, although take as a result of these activities may require other authorization from CDFW. Section 1911 of the CNPPA dictates that all state departments and agencies shall utilize their authority in furtherance of the purposes of the CNPPA by carrying out programs for the conservation of endangered or rare native plants. Notwithstanding that provision, CNPPA Section 1913 directs that the performance by a public agency of its obligation to provide service to the public shall not be restricted because of the presence of rare or endangered plants.

6.2.6 California Native Plant Society (CNPS) Inventory

The CNPS has prepared and regularly updated an "Inventory of Rare and Endangered Vascular Plants of California." In general, the CDFW qualifies plant species on List 1B (Plants Rare, Threatened, or Endangered in California and Elsewhere) or List 2 (Plants Rare, Threatened, or

Endangered in California, But More Common Elsewhere) of the CNPS Inventory for legal protection under CEQA. Species on CNPS List 3 (Plants About Which We Need More Information--A Review List) or List 4 (Plants of Limited Distribution--A Watch List) may, but generally do not, qualify for protection under CEQA.

6.2.7 City of Menlo Park Municipal Code / Heritage Tree Ordinance

Chapter 13.24 of the Menlo Park Municipal Code, Heritage Trees sets forth that is unlawful for any person to remove, or cause to be removed, any heritage tree from any parcel of property in the city, or prune more than one-fourth of the branches or roots within a twelve (12) month period, without obtaining a permit[15]. The ordinance also requires a tree protection plan for any work performed within an area ten (10) times the diameter of the tree (i.e., the tree protection zone).

Section 13.24.020 of the code defines "heritage tree" as any of the following:

(1) A tree or group of trees of historical significance, special character or community benefit, specifically designated by resolution of the city council;

(2) An oak tree (*Quercus*) which is native to California and has a trunk with a circumference of 31.4 inches (diameter of ten (10) inches) or more, measured at fifty-four (54) inches above natural grade. Trees with more than one trunk shall be measured at the point where the trunks divide, with the exception of trees that are under twelve (12) feet in height, which will be exempt from this section.

(3) All trees other than oaks which have a trunk with a circumference of 47.1 inches (diameter of 15 inches) or more, measured fifty-four (54) inches above natural grade. Trees with more than one trunk shall be measured at the point where the trunks divide, with the exception of trees that are under twelve (12) feet in height, which will be exempt from this section.

6.2.8 City of Menlo Park General Plan

The following policies from the City of Menlo Park's General Plan Open Space and Conservation Element are relevant to biological resources at the proposed school site:

- Sensitive Habitats. Require new development on or near sensitive habitats to provide baseline assessments prepared by qualified biologists, and specify requirements relative to the baseline assessments (Policy OSC1.3).
- Heritage Trees. Protect Heritage Trees, including during construction activities through enforcement of the Heritage Tree Ordinance (Chapter 13.24 of the Municipal Code) (Policy OSC1.15).

6.3 PROJECT IMPACTS AND MITIGATION MEASURES

Consistent with CEQA and the CEQA Guidelines Appendix G, this EIR focuses on the potentially significant direct and indirect impacts that could result from implementation of the proposed project, as described in Chapter 2. The SUHSD has determined that, based on the

[15] Per section 01.04.010(9) of the Menlo Park Municipal Code, the term person means "means natural person, joint venture, joint stock company, partnership, association, club, company, corporation, business, trust, organization, or the manager, lessee, agent, servant, officer or employee of any of them."

characteristics of the proposed project and the environmental conditions described in Section 6.1 the proposed Menlo Park Small High School Project:

- Does not have the potential to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS because the project site and surrounding area do not contain suitable habitat for such species, and such species have not been previously recorded on or adjacent to the project site.
- Does not have the potential to result in a substantial adverse effect on any riparian habitat or other sensitive natural community because the project site does not contain any riparian habitat and is not located in the vicinity of any sensitive natural community identified in any local, regional, or other plan, policy, or regulation.
- Does not have the potential to result in a substantial adverse effect on any federally protected wetland defined by Section 404 of the Clean Water Act because the because the project site does not contain any such wetlands or jurisdictional water features and none are adjacent to the site.
- Does not have the potential to substantially interfere with the movement of native fish or wildlife species or established wildlife corridors or impede the use of native wildlife nursery sites because the project site is already developed with a building, parking lot and landscaping and is in an urban commercial and industrial setting that contains roads, buildings and other development.
- Does not have the potential to conflict with a local policy or ordinance protecting biological resources because such policies do not apply to the project.
- Does not have the potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan because no such plan is in effect that covers the project site.

For these reasons, these issues are not discussed further in this EIR. The potentially significant impacts that could result from implementation of the proposed project are described in section 6.3.2 below.

6.3.1 Thresholds of Significance

Based on CEQA Guidelines Appendix G and thresholds applicable to the project, the implementation of the proposed project would have a significant environmental impact related to biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any nesting birds protected by the MBTA and California Fish and Game Code or roosting bats protected by California Fish and Game Code; or

6.3.2 Potential Impacts to Nesting Birds and Roosting Bats

Implementation of the proposed project would require tree removal, grading and other ground disturbance, and demolition and construction of buildings that could temporarily impact native nesting birds or roosting bats. Project-related tree removal could also result in the permanent loss of habitat for nesting birds, roosting bats and other wildlife.

Impact BIO-1: Implementation of the proposed project could result in impacts to nesting birds, and roosting bats.

Trees and other vegetation on the site could provide nesting habitat for migratory birds protected by the MBTA and California Fish and Game Code. The larger trees at the site, particularly the eucalyptus trees, contain peeling bark and crevices that could provide roosting bat habitat; however, based on a reconnaissance level survey of the site, none of the tree openings appear large enough to support a maternity roost. Nevertheless, bats may periodically use the large trees on the site as day roosts.

Nesting birds and roosting bats could be temporarily and permanently impacted by the project. Short-term impacts could include the loss of bird nests and bat roosts from the removal of on-site trees, as well as other woody vegetation during project construction. The exact number of trees to be removed would be dependent on final site design of the proposed project; however, as described in section 2.3.4, the preliminary planting plan prepared for the project proposes increasing the total number of trees on site (from 48 to 70) and a 4:1 replacement ratio for lost heritage trees (LPA 2016a, 2016b). Short-term impacts to nesting birds or roosting bats could also include the loss of reproductive success or nesting failure or roost abandonment as a result of disturbance from nearby demolition and construction activities; however, the project site is currently developed and occupied by an industrial use and is set in an urban area. Thus, there is already a high degree of human disturbance at the site and nesting birds and roosting bats in the area are likely habituated to some degree of disturbance. Permanent impacts to nesting birds, roosting bats and other wildlife would include the loss of habitat due to the removal of trees and shrubs.

The impacts to nesting birds and roosting bats that could occur with implementation of the proposed project is considered a potentially significant impact. To reduce the potential for implementation of the project to impact nesting birds and roosting bats, the District shall implement Mitigation Measures BIO-1A, BIO-1B, and BIO-1C below.

Mitigation Measure BIO-1A: Avoid and Minimize Impacts to Nesting Birds

The District shall initiate project construction outside of the bird nesting season (defined as the time between September 1st and January 31st). If it is not feasible to start construction outside the bird nesting season (i.e., construction would start between February 1st and August 31st), a qualified biologist shall perform a pre-construction survey to identify active bird nests on or near the site. The pre-construction survey shall take place no more than 7 days prior to the start of construction, and if more than 7 days pass with no construction activities, another pre-construction survey shall be required. The survey shall include all trees and shrubs on the site, all buildings or other structures to be demolished, and all trees and shrubs within a 250-foot radius of the site. If an active, native bird nest is found during the survey, the biologist, shall, in consultation with the CDFW, designate a construction-free buffer zone (typically 500 feet for raptors and 250 feet for other birds, but these distances can usually be reduced in urban areas) around the nest to remain in place until the young have fledged.

Mitigation Measure BIO-1B: Avoid and Minimize Impacts to Roosting Bats

A qualified biologist shall visually inspect trees or structures to be removed for bat roosts within 7 days prior to their removal. The biologist will look for signs of bats including sightings of live or dead bats, bat calls or squeaking, the smell of bats, bat droppings, grease stains or urine stains around openings in trees or structures, or flies around such

openings. Trees with multiple hollows, crevices, forked branches, woodpecker holes or loose and flaking bark have the highest chance of occupation and shall be inspected the most carefully. If signs of bats are detected, CDFW shall be contacted about how to proceed. Echo-location surveys may be needed to verify the presence of bats, or an exclusion zone around the occupied tree or structure may be recommended until bats leave the roost. Due to restrictions of the California Health Department, direct contact by workers with any bat is not allowed. The qualified bat biologist will be contacted immediately if a bat roost is discovered during project construction.

Mitigation Measure BIO-1C: Tree Replacement

The District shall replace all trees with a DBH of 15.0 inches or greater that are removed during project construction at a 2:1 ratio. The trees do not need to be replaced in-kind, but should provide similar habitat values as the tree being replaced in terms of structure, food sources, etc. Locally native species such as native oaks (*Quercus* spp.) shall be used as replacement trees when possible, and invasive species such as eucalyptus (*Eucalyptus* spp.) shall be avoided. All replacement trees used shall be healthy and sourced from a reputable nursery, and guaranteed to be pathogen free. Replacement trees shall be monitored for a minimum of three years, and dead or unhealthy replacement trees shall be removed and replaced with healthy new trees. If all replacement trees are healthy after three years of monitoring, monitoring may cease.

With Mitigation Measures BIO-1A, BIO-1B, and BIO-1C, the District would replace potential lost habitat and avoid and minimize the potential impacts to nesting birds and roosting bats that could occur with implementation of the proposed project. Thus, with these measures, Impact BIO-1 would be rendered a less than significant impact.

6.4 REFERENCES

Menlo Park, 2016. Menlo Park Municipal Code Chapter 13.24 Heritage Trees. Available at: http://www.codepublishing.com/CA/MenloPark/, accessed February 25, 2016.

Menlo Park, 2013. Menlo Park General Plan Open Space and Conservation Element. Available at: http://www.menlopark.org/146/General-Plan, accessed May 18, 2016.

California Native Plant Society (CNPS), 2016. Electronic Inventory of Rare and Endangered Vascular Plants of California. Sacramento, California. http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi, accessed February 23, 2016.

California Natural Diversity Database (CNDDB), 2016. California Department of Fish and Wildlife, Biogeographic Data Branch, RareFind 5. Accessed February 24, 2016.

LPA, 2016a. Menlo Park Small High School, 150 Jefferson Drive, Menlo Park, Ca 100% Schematic Design Drawings Package. Developed for Sequoia Union High School District. April 5, 2016.

_____2016b. "Narrative on MPSHS Trees – for CEQA Document". Email communication from Katia McClain, Associate/Managing Director, LPA, to Chris Dugan, MIG. June 23, 2016

CHAPTER 7 CULTURAL / TRIBAL CULTURAL RESOURCES

This chapter describes the cultural and tribal cultural resources that occur or have the potential to occur at the proposed Menlo Park Small High School and summarizes the applicable regulations and policies that govern these resources. This chapter also evaluates the project's potential adverse effects on these resources and identifies mitigation measures to avoid potential impacts.

7.1 ENVIRONMENTAL SETTING

Prehistoric exploitation of the San Francisco Bay Area (Bay Area) occurred around 3000-6000 BC, possibly earlier. The environment at the time would have been an ideal location for prehistoric peoples to utilize the area for hunting, fishing, and other activities. As time advanced it is possible to see, in the archaeological record, the slow establishment of permanent settlements throughout the Bay Area. This enabled the local peoples to use the local resources more efficiently, farm, store food and establish trade networks.

The proposed small high school site lies in the northern territory of the Ohlone Native American peoples, who are sometimes also known as Costanoan. The Ohlone consisted of several ethnic groups based around a common language and territory. They inhabited fixed villages, although would move around temporarily to take advantage of seasonal foodstuffs, such as acorns, waterfowl, and salmon. Despite inhabiting fixed villages, the Ohlone subsisted primarily as hunter-gathers. However, they would burn old growth chaparral to ensure a good harvest of seeds and to provide large grazing areas for prey animals

The Spanish arrived in the Menlo Park area in 1769 and colonization began in the peninsula in 1776 with the construction of the missions. As land development continued, pioneers were granted land by the Spanish, and the proposed school site is situated in what was the Rancho de las Pulgas, the largest land grant in the area. The name of Menlo Park originates in 1854 with the purchase of 1700 acres by two brothers (although some sources claim 640 acres) of land, bordering the present-day street, El Camino Real. In 1874, Menlo Park became the second incorporated city in San Mateo County, although it was unincorporated again in 1876. After a population boom in World War I, the city was re-incorporated in 1923 with virtually unchanged boundaries from the 1854 incorporation.

7.1.1 150 Jefferson Drive Development History

150 Jefferson Drive was developed as part of the Bohannon Industrial Park. Purchased in 1954 by David Bohannon, it is an early example of the industrial park as a new type of development that emerged along with suburban growth. The lot at 150 Jefferson drive was created in 1963, and was purchased and developed in the same year by Bucal Inc., a hospital supply company. The building that was constructed on the site is the same building that stands today. It was designed by Charles Luckman Associates, a Los Angeles Based firm headed by famed architect Charles Luckman. The surrounding buildings were built at a similar time and, as such, are typical of those in an industrial/ office park consisting of mid-rise office buildings and commercial warehouses.

The building on the site of 150 Jefferson Drive is a one-story commercial warehouse building. The building has a temporary, wood and corrugated steel canopy structure. It was designed and built in the International Style, characterized by rectilinear forms, plane surfaces devoid of applied ornamentation, and open, fluid spaces. There is an addition to the southwest side of the

building, added in 1970 and designed by Cabak Associates, a local firm based in Menlo Park, which did not affect the original building in a significant way, using the same building materials and design aesthetics of the International Style. The building has remained virtually unchanged since the addition in 1970. The remaining site area is a blacktop surface surrounded by light, manicured vegetation and a manicured hedgerow.

The existing building was evaluated its eligibility to be listed on the National Register of Historic Places (NRHP) or the California Register of Historic Places (CRHR) and found not to qualify for eligibility (MIG|TRA 2016, see Appendices F1 and F3).

7.1.2 Record Search Results

The California Historical Resources Information System (CHRIS) lists potentially significant historical resources and makes determinations as to their eligibility for the National Register. The CHRIS includes the statewide Historical Resources Inventory (HRI) database maintained by the State Office of Historic Preservation (OHP) and the records maintained and managed by twelve independent regional Information Centers. The Northwest Information Center (NWIC) at Sonoma State University maintains records for the region that includes the City of Menlo Park.

A literature review and records search of the CHRIS for potential cultural resources at the proposed Menlo Park Small High School site was performed for the project by the NWIC in March 2015 (NWIC 2015, see Appendix F1). The results of the search showed no cultural resources and no recorded archaeological resources at or within one mile of 150 Jefferson Drive. The CHRIS search also failed to show any historic resources from historical literature, and no buildings are shown on the project site on the 1899, 1941, 1948, and 1961 USGS 15 minute topographic maps. As there is no evidence to suggest a history of buildings, structures, or other activity on the project site, the NWIC identified a low potential of discovering unknown historic period archaeological remains. The City of Menlo Park does not keep a local historic register of historic resources for this project to consider.

Although there is no evidence to suggest pre-historic activity on the site, the area is known to have been inhabited by Native Americans, and would have been a good location for seasonal activities, such as hunting and fishing, and potentially temporary dwellings. As such, the NWIC has determined that there is a moderate potential of identifying unknown Native American archaeological resources. As Native American tribes have historical resource information not included in the CHRIS inventory, MIG|TRA contacted the Native American Heritage Commission (NAHC) in February 2016 for a records search. No cultural resources were identified by the NAHC on the project site or within the one-half mile study area around the site (NAHC 2016, see Appendix F1). Following the NAHC search, the representatives of five Native American tribes were contacted, as recommended by the NAHC, for information on any tribal resources not known to the NAHC and for additional comments. No additional resources were known to the representatives contacted and no comments were made (see, Appendix F1).

A Paleontological Search was conducted by the University of California Museum of Paleontology (UCMP) (see Appendix F1). The results of the search showed no paleontological resources within the site footprint and two mammalian fossil fragments within the USGS quad that the project site is situated in, both of which are dated from the Pleistocene epoch. The paleontological record shows the fossils to be the distal radius of *Camelops hesternus*, an extinct relative of the modern-day camel, and the mid humerus of *Bison latifrons*, an extinct megafauna species of bison. Both fossils were found over 1.5 miles away from the project site. Given the few finds and wide distribution in the area surrounding the project site, it can be considered that

there is a low potential for the discovery of buried paleontological resources within the project site.

In addition to the record searches, a qualified MIG | TRA archaeologist surveyed the site in February 2016. The survey was comprised of transects around the existing building. The survey did not find any evidence of cultural or historic remains on the site surface.

7.2 REGULATORY SETTING

7.2.1 CEQA

CEQA establishes statutory requirements for the formal review and analysis of projects. CEQA recognizes archaeological resources as part of the environment. A project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment (PRC §21084.1).

A record search to determine whether any previously identified resources exist within the project boundary is the first step in determining whether archaeological resources may be present. A record search is conducted at the applicable CHRIS.

7.2.1.1 Historical Resources

Pursuant to CEQA Guidelines Section 15064.5 (a) the term "historical resources" includes the following:

- A resource listed, or determined to be eligible by the State Historical Resources Commission for listing, in the CRHR (PRC §5024.1, 14 CCR, §4850 et seq.).
- A resource included in a local register of historical resources, as defined in Public Resources Code Section 5020.1 (k) or identified as significant in a historical resource survey meeting the requirements of Public Resources Code Section 5024.1 (g), shall be presumed historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (PRC §5024.1, Title 14 CCR, §4852) including the following:
    a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
    b. Is associated with the lives of persons important in our past;
    c. Embodies the distinctive characteristics of type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
    d. Has yielded, or may be likely to yield, information important in prehistory or history.
- The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to PRC §5020.1(k)), or identified in a historical resources survey (meeting the criteria in PRC

§5024.1(g)) does not preclude a lead agency from determining that the resource may be a historical resource as defined by Public Resources Code Section 5020.1(j) or 5024.1.

Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be "historical resources" for the purposes of CEQA unless an abundance of evidence indicates otherwise (Public Resources Code Section 5024.1; California Code of Regulations, Title 14, Section 4850).

7.2.1.2 Unique Archaeological Resources

Pursuant to CEQA Guidelines Section 21083.2(g), a unique archaeological resource is an archaeological artifact, object, or site, about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

The resource must also be at least 100 years old, possess "substantial stratigraphic integrity" (i.e., is substantially undisturbed); and the resource involves "important research questions that historical research has shown can be answered only with archaeological methods."

To the extent that unique archaeological resources are not preserved in place or not left in an undisturbed state, mitigation measures shall be required (PRC §21083.2(c)). If it is proven that an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment, and no further CEQA review is required (14 CCR §15064.5(d)).

Unique Paleontological Resources

CEQA does not currently define a unique paleontological resource or site; however, using the criteria from the "Unique Archaeological Resource" above, paleontological resources can be shown to fulfil requirements to be considered important archaeological resources, even if they themselves are not explicitly defined under CEQA.

7.2.1.3 Assembly Bill 52 / Cultural Tribal Resources

Assembly Bill (AB) 52, approved in September 2014, creates a formal role for California Native American tribes by creating a formal consultation process and establishing that a substantial adverse change to a tribal cultural resource has a significant effect on the environment. Tribal cultural resources are defined as:

1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    A) Included or determined to be eligible for inclusion in the CRHR
    B) Included in a local register of historical resources as defined in PRC Section 5020.1(k)
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1 (c). In

> applying the criteria set forth in PRC Section 5024.1 (c) the lead agency shall consider the significance of the resource to a California Native American tribe.

A cultural landscape that meets the criteria above is also a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. In addition, a historical resource described in PRC Section 21084.1, a unique archaeological resource as defined in PRC Section 21083.2(g), or a "non-unique archaeological resource" as defined in PRC Section 21083.2(h) may also be a tribal cultural resource if it conforms with above criteria.

AB 52 requires a lead agency, prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation. AB 52 states: "To expedite the requirements of this section, the Native American Heritage Commission shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated with the project area."

The requirements of AB 52 apply only to a project that has a notice of preparation or a notice of negative declaration or mitigated negative declaration filed on or after July 1, 2015.

7.2.2 National Register of Historic Places Criteria

The criteria for determining whether a property is eligible for listing in the National Register of Historic Places (NRHP) are found in Title 36 of the Code of Federal Regulations, Section 60.4 and are reproduced below:

> The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
>
> a. That are associated with events that have made a significant contribution to the broad patterns of our history; or
> b. That are associated with the lives of persons significant in our past; or
> c. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinctions; or
> d. That have yielded, or may be likely to yield, information important in prehistory or history.

For a property to qualify for the NRHP, it must meet at least one of the above National Register Criteria for Evaluation by being associated with an important context and retaining historic integrity of those features necessary to convey its significance.

7.2.3 California Register of Historical Resources

The OHP administers CRHR, which was established in 1992 though amendments to the Public Resources Code, as an authoritative guide to be used by state and local agencies, private groups,

and citizens to identify the state's historical resources and to indicate what properties are to be protected from substantial adverse change. The CRHR includes resources that have been formally determined eligible for, or listed in, the NRHP, State Historical Landmark Number 770 or higher, Points of Historical Interest recommended for listing by the State Historical Resources Commission, resources nominated for listing and determined eligible in accordance with criteria and procedures adopted by the State Historical Resources Commission, and resources and districts designated as city or county landmarks when the designation criteria are consistent with CRHR criteria.

A resource also has to be at least 50 years old and must possess several of the seven aspects of integrity to be eligible for listing in the NRHP and/or the CRHR. Integrity is defined as "…the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance" (OHP 2006). The seven levels of integrity are location, design, setting, materials, workmanship, feeling, and association. Resources that are listed in the NRHP are automatically eligible for the CRHR (PRC §5024.1(c)).

Both NRHP and CRHR evaluations must be made within an appropriate historic context. A historic context includes three components: a time period, place, and event. A historic context is developed through one or more research themes to help identify the resources' significance at the local, state, or national level. A resources' integrity is based on its ability to convey its significance through data requirements. Data requirements can best be described as evidence found within the archaeological record that conveys the resources' historical significance. If the appropriate data requirements are lacking, the resource arguably lacks significance and is therefore not an eligible resource.

7.2.4 Public Resources Code Section 5097.5

Public Resources Code Section 5097.5 states, "it is illegal for any person to knowingly and willfully excavate or remove, destroy, injure, or deface cultural resources." Furthermore, the crime is a misdemeanor punishable by a fine not to exceed $10,000 and/or county jail time for up to one year. In addition to a fine and/or jail time, the court can order restitution, and restitution will be granted of the commercial and archaeological value of the property.

7.2.5 California Health and Safety Code

Health and Safety Code Section 7050.5 regulates procedures in the event of human remains discovery. Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the County Coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are determined to be Native American, the County Coroner is required to contact the NAHC. The NAHC is responsible for contacting the most likely Native American descendent, who would consult with the local agency regarding how to proceed with the remains.

7.2.6 City of Menlo Park General Plan

The City of Menlo Park's General Plan Open Space and Conservation Element contains the following policies related to cultural resources:

- Buildings, objects, and sites of historic and/or cultural significance should be preserved (Policy I-H-11).

- Prehistoric or Historic Cultural Resources Investigation and Preservation. Preserve historical and cultural resources to the maximum extent practical (Policy OSC3.1).
- Prehistoric or Historic Cultural Resources Protection. Require significant historic or prehistoric artifacts be examined by a qualified consulting archaeologist or historian for appropriate protection and preservation, and to ensure compliance with local, State and Federal regulations (Policy OSC3.2).
- Archaeological or Paleontological Resources Protection. Protect prehistoric or historic cultural resources either on site or through appropriate documentation as a condition of removal. Require that when a development project has sufficient flexibility, avoidance and preservation of the resource shall be the primary mitigation measure, unless the City identifies superior mitigation. If resources are documented, undertake coordination with descendants and/or stakeholder groups, as warranted (Policy OSC3.3).
- Prehistoric or Historic Cultural Resources Found During Construction. Require that if cultural resources, including archaeological or paleontological resources, are uncovered during grading or other on-site excavation activities, construction shall stop until appropriate mitigation is implemented (Policy OSC3.4).
- Consultation with Native American Tribes. Consult with those Native American tribes with ancestral ties to the Menlo Park city limits regarding General Plan Amendments and land use policy changes (Policy OSC3.5).
- Identification of Potential Historic Resources. Identify historic resources for the historic district in the Zoning Ordinance and require design review of proposals affecting historic buildings (Policy OSC3.6).

7.3 PROJECT IMPACTS AND MITIGATION MEASURES

Consistent with CEQA and the CEQA Guidelines Appendix G, this EIR focuses on the potentially significant direct and indirect impacts that could result from implementation of the proposed Menlo Park Small High School Project, as described in Chapter 2 of this EIR. The SUHSD has determined, based on the characteristics of the project and the environmental conditions described in Section 7.1 that:

- The Menlo Park Small High School Project does not have the potential to result in a substantial adverse impact to a unique geologic feature because the proposed school site is a developed industrial lot that does not contain any unique geologic features.
- The Menlo Park Small High School Project does not have the potential to result in a substantial adverse impact to known (i.e., recorded) historical resources, archaeological resources, paleontological resources, human remains, and/or cultural tribal resources because the proposed school site is a developed industrial lot that does not contain any such resources.

The potentially significant impacts that could result from implementation of the project are described in Section 7.3.2 below.

7.3.1 Thresholds of Significance

Based on CEQA Guidelines Appendix G, the implementation of the project would have a significant environmental impact related to cultural or tribal cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in §15064.5;
- Directly or indirectly destroy a unique paleontological resource;
- Disturb any human remains, including those interred outside of formal cemeteries; or
- Cause a substantial adverse change in the significance of a tribal cultural resource.

7.3.2 Potential Impacts to Historical Resources, Archaeological Resources, Paleontological Resources, Human Remains, and/or Tribal Cultural Resources

Pursuant to CEQA Guidelines Section 15064.5(b), a substantial adverse change in the significance of an historical resource because of a project is defined as "the demolition, destruction, relocation, or alteration of a resource or its immediate surroundings such that its significance is materially impaired". In general, a historical resource's significance is materially impaired when it can no longer convey its historical significance and therefore can no longer justify its inclusion in, or eligibility for, inclusion in the CRHR, the local register of historical resources pursuant to Public Resources Code Section 5020.1(k), or its identification in an historical resources survey meeting the requirements of Public Resources Code Section 5024.1(g). To determine the significance of impacts to archaeological resources because of a project, the SUHSD will follow the specifications provided in CEQA Guidelines Section 15064.5(c).

Impact CUL-1: Project construction could disturb unrecorded historical, archaeological, paleontological, and tribal cultural resources and/or unrecorded human remains.

Project construction would require the use of earth moving equipment and activities (e.g., removing existing foundations, trenching, grading) that would disturb surface and upper sub-surface soils. Site construction would also include auger-cast piling activities to a depth of approximately 55 feet below ground surface. Therefore, these activities could result in a substantial adverse change to unknown (i.e., unrecorded) cultural, paleontological, and other resources that may be buried in native site soils. The unknown resources that could be affected include:

- Historic-period archaeological resources, which would include artifacts such as stone or adobe foundations or walls, structures, and refuse deposits or bottle dumps, often located in old wells or privies.
- Native American resources, including chert or obsidian flakes, projectile points, mortars, and pestles; and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials.
- Paleontological resources, which could be discovered in native soils exposed during the piling process which might include plant and animal fossils as well as evidence of early human/proto-human activity or remains.

The potential for impacts to unknown tribal, cultural and historic resources is considered low because: 1) The proposed school site has been subject to prior development activities that would likely have disturbed, altered, or eliminated any near sub-surface cultural and historic resources that may have been present at the site; 2) There are no known cultural, historical or tribal resources within the study area surrounding the site; and 3) Substantial excavation and disturbance of native soils is not anticipated, with the exception of piling activities. Rather, SUHSD would import soil to raise building pad elevations above floodplain levels (see Chapter 9, Hydrology and Water Quality).

Similarly, the potential for impacts to unknown paleontological resources is considered low based on the findings from the UCMP search (see section 7.1.2); however, the augercast piles would cut through the archaeological horizon at which such resources could occur expected, and given the number of anticipated piles (approximately 185), an unrecorded paleontological site present beneath the proposed school site would have a high risk of being negatively affected by the piling activities. The destruction, significant alteration, or other substantial adverse change to historical, archaeological, paleontological, and tribal cultural resources and/or human remains during construction of the project is considered a potentially significant impact. To reduce the potential for project construction to disturb these resources, the SUHSD shall implement Mitigation Measures CUL-1A, CUL-1B and CUL-1C.

Mitigation Measure CUL-1A: Minimize and Avoid Impacts to Unrecorded Cultural and Historic Resources, Tribal Cultural Resources, and Human Remains

In the event that unrecorded cultural or historical resources, or tribal cultural resources are accidentally discovered during project construction, the SUSHD shall:

- Treat any potential cultural, historical, tribal and paleontological material as a resource to be protected until determined otherwise by a qualified archaeologist or paleontologist.
- Ensure that no potential resource is removed or damaged by project personnel.
- Stop all earth-disturbing work (e.g., excavation, piling, foundation removal, etc.) within 50 feet of the discovered material, avoid altering the material and its context in any way, and immediately (within 24 hours) have the resource evaluated by a qualified archaeologist or paleontologist before continuing work within 50 feet of the location of the discovered resource
- In the event the find is determined to be a historical or unique archaeological resource, a qualified archaeologist shall develop measures, in accordance with Public Resources Code Section 21083.2 and Section 15126.4 of the CEQA Guidelines, which avoid or substantially lessen potentially significant impacts on cultural or tribal cultural resources, with a preference for preservation in place. The SUHSD shall consult with the project archaeologist before continuing work within 50 feet of the location of the discovered resource.

If unrecorded human remains are accidently discovered during construction activities, the measures specified in Section 15064.5(e)(1) of the CEQA Guidelines shall be followed:

- There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Santa Clara coroner is contacted to determine that no investigation of the death is required. If the coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall identify the person or persons it believes to be most likely descended from the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98; or, if the NAHC cannot identify the most likely descendants (MLD), the MLD fails to make a recommendation, or the property owner rejects the MLD's recommendations, the property owner can rebury the remains and

associated burial goods with appropriate dignity in an area not subject to ground disturbance.

Mitigation Measure CUL-1B: Minimize and Avoid Impacts to Paleontological Resources

If paleontological resources are encountered, the SUHSD shall avoid altering the resource. All piling activities will cease immediately and, additionally, no work shall be carried out within the stratigraphic context that the resource was discovered in until a qualified paleontologist has evaluated, recorded, and determined appropriate treatment of the resource consistent with protocols of the Society for Vertebrate Paleontology and in consultation with the County.

Mitigation Measure CUL-1C: Minimize and Avoid Impacts to all Archaeological, Cultural, Historical, and Paleontological Resources from Piling Activities

A qualified archaeologist shall monitor not less the 5% of the total number of augercast piles during the excavation process. The monitoring will consist of a representative sample across the entire area affected by piling. The archaeologist will divide the site into areas, and by coordinating with the piling crew and site engineer, will ensure that the first piles from each area are monitored. Additional monitoring of piling activities is at the discretion of the site archaeologist, but will not exceed 10% of the total number of piles if no archaeological, cultural, historical or paleontological resources are discovered during the piling operations.

Mitigation Measures CUL-1A, CUL-1B and CUL-1C are consistent with the requirements of the Public Resources Code and the recommendations provided by NWIC. These measures would avoid or reduce potentially significant effects on cultural resources, tribal cultural resources, human remains, and paleontological resources by monitoring intrusive construction methods, stopping work and ensuring unrecorded resources are appropriately evaluated and handled by qualified personnel. Thus, with these measures, Impact CUL-1 would be rendered a less than significant impact of the project.

7.4 REFERENCES

Margolinm, M. 1978. The Ohlone Way: Indian Life in the San Francisco-Monterey Bay Area. Berkeley, CA

Mays, S. 1998. The Archaeology of Human Bones. Routledge, London and New York.

MIG | TRA Environmental Sciences 2016. *Historic Evaluation 150 Jefferson Drive.* March 2016.

Native American Heritage Commission (NAHC) 2016. "150 Jefferson Drive School Project, San Mateo County". Letter from Sharaya Souza, Staff Services Analyst, NAHC to Robert Templar, MIG | TRA Environmental Sciences. February 17, 2016.

Northwest Information Center (NWIC) 2015. "Record search results for the proposed Sequoia Union High School District (SUHSD) 150 Jefferson Drive High School Project". Letter from Mark Castro, Researcher, NWIC, to Megan Kalyankar, MIG | TRA Environmental Sciences. NWIC File No.: 14-1215. March 17, 2015.

CHAPTER 8 HAZARDS AND HAZARDOUS MATERIALS

This chapter describes the environmental and regulatory setting and potential impacts related to hazards and hazardous materials at and in the vicinity of the proposed Menlo Park Small High School site. Much of the information in this chapter is derived from a series of technical evaluations and reports the SUHSD has prepared for the project in accordance with Title V of the California Code of Regulations, the California Education Code, and other state requirements, including:

- "*Environmental Oversight Agreement, Docket Number HAS-FY15/16-049, 150 Jefferson Drive (AKA Menlo Park Proposed School), Sequoia Union High School District (Site Code: 204273-11),*" October 29, 2015 (DTSC 2015, see Appendix G1)
- "*Soil, Soil Vapor, and Groundwater Quality Evaluation 150 Jefferson Drive, Menlo Park, California,"* prepared by Cornerstone Earth Group, December 12, 2014 (Cornerstone 2014, see Appendix G2)
- "*Preliminary Environmental Assessment Report, Menlo Park Small High School Project, 150 Jefferson Drive, Menlo Park, California (Site Code: 204273)*," prepared by Cornerstone Earth Group, May 2016 (Cornerstone 2016, see Appendix G3)
- "*Approval of the Preliminary Environmental Assessment Report, Sequoia Union High School District, Menlo Park Proposed School (A.K.A. Menlo Park Small High School Project), 150 Jefferson Drive, Menlo Park, San Mateo County (Project Code 204273),"* June 2015 (DTSC 2016a, see Appendix G3)
- "*Pipeline Safety Hazard Assessment New School Site in Menlo Park*," January 2015 (PlaceWorks 2015, see AppendixG4)

The main contents of the Soil, Soil Vapor, and Groundwater Quality Evaluation and PEA are presented in Appendix G2 and G3; appendices to these reports, constituting several hundred pages of material, are available for review at the SUHSD's offices at 480 James Avenue in Redwood City and electronically on CD. The SUHSD executed an Environmental Oversight Agreement (EOA) with the DTSC in October 2015. The EOA covered the DTSC's oversight of the preparation of a Preliminary Environmental Assessment (PEA) report (DTSC Site Code 204273; Envirostor ID 60002163) and outlines the steps the DTSC and SUHDS would take to ensure construction and operation of the project would not result in a release or potential release of hazardous substances that could pose a threat to human health or the environment (see section 8.1.2).

8.1 ENVIRONMENTAL SETTING

The proposed Menlo Park Small High School would be located at 150 Jefferson Drive in Menlo Park, CA. The approximately 2.1-acres site is located in a part of the City of Menlo Park where nearly all parcels are zoned General Industrial District (M-2) or Commercial Business Park (M-3) and designated by the City's General Plan for Limited Industry or Commercial Business Park use.

A hazardous waste site contains or formerly contained and has residual hazardous materials. Hazardous waste is defined as "a waste with a chemical composition or other properties that make it capable of causing illness, death, or some other harm to humans and other life forms when mismanaged or released into the environment" (DTSC 2010). Hazardous materials may include, but are not limited to oils, pesticides, poisons, gasoline, acids, cleaning materials, and

medical waste products. The proposed Menlo Park Small High School site and vicinity are located within a part of the City of Menlo Park where commercial and industrial development has contributed to regional soil and ground water contamination. A search of the California Department of Toxic Substances Control's (DTSC) EnviroStor database and the State Water Resources Control Board's (SWRCB) Geotracker database revealed a total of seven "open - inactive" or hazardous materials site investigation cases, two "inactive – needs evaluation" cases, and three "completed" or "closed" cases within 0.25 miles of the proposed school site (DTSC 2015b, SWRCB 2016). The search did not identify any permitted underground storage tanks within 0.25 miles of the proposed school site. Searches were also completed for the SWRCB's Cease and Desist Order (CDO) / Cease and Abatement Order (CAO) list, CalEPA's list of Sites with Waste Constituents above Hazardous Waste Levels Outside of the Management Unit, and CalEPA's list of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code (CalEPA 2012a, 2012b, 2016); the proposed school site is not located on any of these lists.

8.1.1 Past Land Uses and Activities

Historical air photographs and other sources of information indicate the proposed was undeveloped until about 1960; however, a topographic map from 1961 shows a railroad spur on the southern portion of the site. By 1963, the Bohannon Industrial Park was under development, and construction of the existing facilities at 150 Jefferson Drive was complete. From 1963, to 1980, the site housed hospital supply and business support operations. Bay Associates Wire Technologies, Incorporated, a business specializing in custom cable and cable assembly solutions, has occupied the site since about 1980 (Cornerstone 2014).

8.1.2 Present Site Conditions / Preliminary Environmental Assessment (PEA) Results

In accordance with state requirements, the SUHSD has prepared a PEA Report to determine whether a release or potential release of hazardous substances that could pose a threat to human health (via ingestion, skin contact, or inhalation) or the environment could occur as a result of project construction and long-term operation (Cornerstone 2016). A PEA includes environmental sampling and a human health screening risk evaluation conducted according to DTSC guidelines. The purpose of the screening level risk assessment is to estimate the potential chronic human health cancer risks / non-carcinogenic hazards from site contamination. The screening evaluation is health conservative (i.e., overestimate), preliminary evaluation of potential risks and hazards (assuming long-term exposure associated with a residential land use). In general, if a PEA finds no significant health or environmental risks based on the site sampling, no further site investigation or remedial action is required. If, however, the PEA identifies significant contamination, further site investigation and response actions may be required.

Based on historical and existing land uses at and in the immediate vicinity of the proposed Menlo Park Small High School site, the PEA investigated site soils, soil gas, and groundwater for the following chemicals of potential concern:

- Termiticides and organochlorine pesticides (OCPs) in soil from historic pest control activities at the site
- Lead in soil from weathering of lead-based paint from on-site building structures
- Polychlorinated biphenyls (PCBs) in soil from a historic transformer and historic building materials

- Chlorinated volatile organic compounds in regional groundwater from a source or sources upgradient (to the south / southwest) of 150 Jefferson Drive and vicinity three "open" hazardous materials site investigations located within 1,000 feet of the proposed School Site
- Radon

The PEA sampled surface and/or subsurface soils at five discreet locations distributed throughout the proposed school site (see Appendix G3, Figure 2); soil samples were tested for the presence of lead and other metals, OCPs, PCBs, total petroleum hydrocarbons (TPH), polyaromatic hydrocarbons (PAHs), and VOCs. Soil vapors were also sampled at five discreet locations, including two locations within the existing building at 150 Jefferson Drive (see Appendix G3, Figure 2); soil vapor samples were tested for VOCs and other fixed gases such as methane, carbon dioxide, etc.

PEA samples were collected according to DTSC and CalEPA procedures and guidelines, analyzed using USEPA- and/or CARB-approved methods, and compared against appropriate screening criteria, including:

- U.S. EPA Regional Screening Levels (RSLs) are human-health-risk-based soil, air, or water concentrations developed by the USEPA for more than 670 chemicals using toxicity criteria established or agreed upon by the USEPA and assuming residential land and commercial/industrial land use.
- California Human Health Screening Levels (CHHSLs) are soil or soil vapor concentrations developed by the Cal/EPA Office of Environmental Health Hazard Assessment (OEHHA) for about 60 chemicals using toxicity criteria primarily established by the OEHHA.
- San Francisco Bay Regional Water Quality Board (RWQCB) Environmental Screening Levels (ESLs) are a conservative estimate of the concentration needed for a chemical to pose a potential chronic threat to human health and the environment. The presence of a chemical in soil, soil gas, or groundwater at concentrations below the applicable ESL can be assumed to not pose a chronic threat to human health or the environment.

The results of the PEA soil, soil gas, and groundwater sampling are summarized below. Please refer to Appendix G2 for detailed sampling results.

8.1.2.1 Lead

Lead and other metals such as cadmium, zinc, selenium, etc. occur naturally in the environment and can also be released into the environment by industrial and other manufacturing processes or waste streams. Maximum lead levels in PEA soil samples (9.9 milligrams per kilogram (mg/kg) were below applicable the screening level of 80 mg/kg. Therefore, the Final PEA concludes concentrations of lead and other metals do not warrant remedial action at the site.

8.1.2.2 Organochlorine Pesticides (OCPs)

OCPs are chlorinated hydrocarbons used from the 1940s to 1960s in agriculture, including chlordane and DDT (dichloro-diphenyl-trichloroethane), and dieldrin. These compounds persist in the environment and accumulate in the fat tissue of animals and can cause a number of potential adverse health effects including neurodevelopment disorders and reproductive effects. OCPs in PEA soil samples were determined to be below laboratory reporting limits (i.e., were

not detected). Accordingly, the PEA concluded OCPs in site soils do not significantly contribute to potential site risks and do not warrant remedial action.

8.1.2.3 Polychlorinated Biphenyls (PCBs)

PCBs are man-made organic chemicals that were manufactured until the late 1970's. Many commercial PCBs mixtures are known in the U.S. by the trade name Aroclor. PCBs have been used as coolants and lubricants in transformers, capacitors, and other electrical equipment because they don't burn easily and are good insulators Although no longer commercially produced in the U.S., PCBs may be present in products and materials produced before 1979, including transformers, caulking, plastics, and other products. Depending on the amount of exposure, PCBs can cause skin conditions such as acne and rashes, liver damage, and other adverse health effects. PCBs in PEA soil samples were determined to be below laboratory reporting limits (i.e., were not detected). Accordingly, the PEA concluded PCBs in site soils do not significantly contribute to potential site risks and do not warrant remedial action

8.1.2.4 Volatile Organic Compounds (VOCs), Polyaromatic Hydrocarbons (PAHs), and Total Petroleum Hydrocarbons (TPHs)

TPHs, PAHs, and VOCs are broad classes or groups of chemicals that have a variety of adverse health effects. TPHs are found in crude oils, petroleum products, and various wastes from industrial processes and contain toxic components such as, but not limited to, benzene, ethylbenzene, toluene, and xylenes. PAHs are a group of chemicals usually released into the air by combustion processes. They are also often present in urban soils due to deposition. VOCs are carbon compounds such as chloroform and napthalene that participate in atmospheric photochemical reactions and are commonly encountered at waste sites.

TPH, PAH, and VOCs at the proposed school site were either not detected or detected at levels that did not exceed applicable screening criteria. Therefore, the PEA concluded concentrations of TPH, PAH, and VOCs in site soils do not warrant remedial action.

8.1.2.5 Human Health Risks Screening Evaluation Results

The PEA prepared for the project included a human health risk screening-level evaluation in accordance with DTSC guidance and recommendations. The evaluation estimated the total incremental lifetime cancer risk and non-carcinogenic health hazards posed by the site, and considered only those chemicals of concern that were reported at concentrations at or above their respective analytical reporting limits[16]. The screening analysis assumed potential exposure via incidental soil ingestion, dermal (skin) contact with soil, and inhalation of vapors or resuspended particulates in ambient air.

The PEA estimated the total excess cancer risk from site soils to be 0.8 in one million, which does not exceed DTSC screening criteria of one in one million. The total non-carcinogenic health hazard from site soils was estimated to be 0.2, which also does not exceed DTSC screening

[16] Analytical reporting limits are lower than the screening criteria discussed in 8.1.2. (e.g., U.S. EPA Regional Screening Levels). In general, they represent the limit of detection for the chemical being analyzed, not a health-based risk exposure concentration. Due to the difficulty involved with modeling and estimating health risks from the inhalation of airborne asbestos generated by disturbance of NOA containing rock or soil, NOA is not included in the screening risk assessment.

criteria of 1.0[17]. Accordingly, the PEA did not recommend remedial actions to eliminate, reduce, and/or mitigate risks posed by site soils.

Soil Gas Risks

The PEA estimated the total excess cancer risk from site soil gases to be 5 in one million, which exceeds DTSC screening criteria of 1 in one million; however, this risk calculation was driven by a single benzene concentration of 220 micrograms per cubic meter ($\mu g/m^3$) detected in a soil vapor sample collected in November 2014. Subsequent sampling at the same general location and depth during this PEA investigation detected benzene at 13 $\mu g/m^3$. The total non-carcinogenic health hazard from site soil gas risks was estimated to be 0.5, which also does not exceed DTSC screening criteria of 1.0.

The PEA notes that benzene a petroleum hydrocarbon vapor, naturally degrades in an aerobic environment and concludes that the site soil vapors do not pose a significant risk to human health or the environment. Accordingly, the PEA did not recommend remedial actions to eliminate, reduce, and/or mitigate risks posed by site soil gases. Nonetheless, the SUHSD would install an impermeable vapor barrier and ventilation system beneath the proposed buildings to provide the highest level of protection to future occupants against potential vapor and radon gas intrusion.

Groundwater Risks

The PEA did not find ground water would pose a significant cancer risk or non-carcinogenic health hazard because no chemicals of potential concern were detected in ground water samples. Accordingly, groundwater remediation is not required for the proposed project.

8.1.3 Railroads

The proposed Menlo Park Small High School site is not located within 1,500 feet of any active railroad. As described in section 2.1.5, an inactive, historic railroad easement is located adjacent to the proposed school site's southern property line, and the inactive Dumbarton Rail Corridor is located approximately 1,035 southeast of the proposed school site at its closet point (as measured from the site's property line to the center of the inactive track). Though re-opening this corridor to commuter rail use has been considered in the past, there are no imminent plans to do so and its re-activation and use is speculative at this point.

8.1.4 Electric Power Lines

There are no high-voltage electric lines within 1,500 feet of the proposed school site (Cornerstone 2014).

8.1.5 Pipelines

The proposed School Site is located within 1,500 feet of natural gas and water pipelines. The pipeline information presented below is taken from the SUHSD's Pipeline Safety Hazard Assessment, prepared for the project on behalf of the SUHSD by PlaceWorks in accordance with Title 5 of the California Code of Regulations, the California Education Code, and California Department of Education policies (Placeworks 2015, see Appendix G4). There are no hazardous liquid pipelines within 1,500 feet of the proposed school site.

[17] As explained in the PEA (Appendix G3, see pg. 16), the health hazards for arsenic and thallium and the cancer risk for arsenic are above DTSC targets, but consistent with regional background conditions and were thus excluded from the human health risk screening analysis.

8.1.5.1 PG&E Natural Gas Pipelines

PG&E operates one high-pressure natural gas pipeline within 1,500 feet of the School Site. The pipeline (Line 101) is a 20-inch steel pipeline originally installed in 1957. The pipeline is located along across U.S. 101 (adjacent to the southbound U.S. 101), approximately 700 feet southwest of the school site at its nearest location. The pipeline runs 34 miles from the City of Milpitas to a natural gas load center in San Francisco. l. The pipeline is buried at least 36 inches below ground surface, and has a maximum allowable operating pressure of 365 pounds per square-inch gauge (psig). PG&E inspects Line 101 quarterly and tests the pipeline for leaks annually. The segment of Line 101 in Menlo Park did not require replacement or repairs as of its last inspection.

8.1.5.2 Water Pipelines

There are five water pipelines greater than or equal to 12 inches in diameter within 1,500 feet of the proposed School Site. Four of the pipelines are owned and operated by the City of Menlo Park and one is operated by the California Water Service Company. Two of these pipelines are located at or adjacent to the proposed School Site - 12-inch water pipelines run under Jefferson Drive and Chrysler Drive. The other three pipelines are located under Chilco Street, U.S. 101, and Scott Drive (across U.S. 101).

8.1.6 Water and Fuel Storage Tanks

The proposed School Site does not contain any above or underground water or fuel storage tanks; however, during the Phase 1 Environmental Site Assessment prepared for the project, a 25-gallon above ground storage tank contains hydraulic fluid (for a trash compactor) was observed on-site (Cornerstone 2014).

8.1.7 Other Potential Hazards

There are no wildlands at or adjacent to the proposed School Site, and the site is not located within an airport land use planning area. The closest airport to the proposed School Site, Palo Alto Airport, is approximately three and a half miles to the southeast. Naturally-occurring asbestos is not present at the proposed school site.

8.1.7.1 Exponent Risk Evaluation

Exponent, Inc. is a multidisciplinary engineering and scientific consulting firm that owns facilities at 149 Commonwealth Drive and 160 Jefferson Drive. The firm specializes in the investigation of accidents incidents and failure analyses of consumer goods and/or materials. As part of the SUHSD's due diligence for the proposed project, the SUHSD performed a records search and facility tour to obtain additional information regarding potential chemical use and operations performed at Exponent's facilities (Cornerstone 2015). The results of the records search and site visit indicated the facilities do no use significant quantities of hazardous material and pose a low risk to the future occupants of the school.

8.2 REGULATORY SETTING

Hazardous materials encompass a wide range of substances, some of which are naturally-occurring and some of which are man-made. Examples include pesticides, herbicides, petroleum products, metals (e.g., lead, mercury, arsenic), asbestos, and chemical compounds used in manufacturing. Determining if such substances are present on or near project sites is important because, by definition, exposure to hazardous materials above regulatory thresholds can result in adverse health effects on humans, as well as harm to plant and wildlife ecology. Due to the fact that these substances have properties that are toxic to humans and/or the ecosystem, there are

multiple regulatory programs in place that are designed to minimize the chance for unintended releases and/or exposures to occur. Table 8-1 provides a general overview and summary of hazardous material regulations; specific regulations related to the development of school projects are presented after this table.

Table 8-1 Regulation of Hazardous Materials

Agency	Responsibilities
U.S. Environmental Protection Agency	Oversees Superfund sites; evaluates remediation technologies; develops standards for hazmat disposal & cleanup of contamination; implements Clean Air & Clean Water Acts, including the National Emission Standard for Hazardous Pollutants for Asbestos.
U.S. Department of Transportation	Regulates and oversees the transportation of hazardous materials.
U.S. Occupational Safety & Health Administration	Implements federal regulations and develops protocol regarding the handling of hazmat for the protection of workers.
California DTSC	Authorized by EPA to implement & enforce various federal hazmat laws & regulations; implements state hazmat regulations; oversees remediation of contamination at various sites.
California Occupational Safety & Health Administration	Implements state regulations and develops protocols regarding the handling of hazardous materials for the protection of workers.
California Air Resources Board / Bay Area Air Quality Management District	Regulates emissions of toxic air contaminants & requires public dissemination information regarding the risk of such emissions.
State Water Resources Control Board / Regional Water Quality Control Board	Regulates the discharge of hazmat to surface and ground waters; oversees remediation of contamination at various sites.
California Department of Public Health	Regulates abatement of lead-based paint; requires accredited training for workers and supervisors; provides certification of workers and supervisors performing abatement; mandates lead abatement be performed in accordance with United States Department of Housing and Urban Development guidelines.
Santa Clara County Department of Environmental Health	Oversees & enforces state/local regulations pertaining to hazardous waste generators and risk management programs, including the California Accidental Release Program; The Department of Environmental Health is the County's Certified Unified Program Agency (CUPA).
City of Menlo Park Fire Department	Participating Agency with San Mateo County Department of Environmental Health. Administers and enforces various hazardous materials, hazardous waste, and underground storage tank programs.

8.2.1 Federal Toxic Substances Control Act and Related Federal Regulations

The Toxic Substances Control Act (TSCA) of 1976 gives the EPA authority to require reporting, record-keeping, and testing requirements relating to chemical substances and/or mixtures. The TSCA addresses the importation, disposal, use, and production of specific chemicals, including PCBs, asbestos, and lead-based paints (EPA 2012).

The TSCA bans the manufacture, processing, use, and distribution in commerce of PCBs. The TSCA gives EPA the authority to develop, implement, and enforce regulations concerning the use, manufacture, cleanup, and disposal of PCBs. Section 40 of the Code of Federal Regulations 761 (40 CFR 761) focuses predominately on the management, clean up, and disposal of PCB-containing materials and equipment that are still in use.

EPA regulates asbestos through the TSCA, the Asbestos Hazard Emergency Response Act, the Asbestos Information Act, and the National Emission Standards for Hazardous Air Pollutants (NESHAP). NESHAP's are rules promulgated by U.S. EPA under the Clean Air Act (40 CFR Section 61.140, et. seq.). Section 61.145 of the asbestos NESHAP regulation, 40 CFR, Subpart M, requires building owners to inspect buildings for asbestos-containing material prior to renovation, remodeling or demolition and to provide written notification of demolition or renovation operations. EPA defines a material that contains more than 1 percent friable asbestos as a regulated asbestos-containing material (RACM).

EPA monitors compliance with lead-based paint program regulations under TSCA Subchapter IV and Residential Lead-Based Paint Hazard Reduction Act of 1992. EPA considers deteriorated, chipping or chalking paint at or above 0.5 percent to be a lead hazard. EPA's 2008 Lead-Based Paint Renovation, Repair and Painting Rule (as amended in 2010 and 2011) requires that firms performing renovation, repair, and painting projects that disturb lead-based paint in homes, child care facilities, and pre-schools built before 1978 be certified by EPA or an authorized state agency, use certified renovators who are trained by EPA-approved training providers, and follow safe work practices. EPA also bans consumer products intended for use by children from having more than 0.009% lead paint when children or consumers will have direct access to the painted surface.

8.2.2 California Code of Regulations

Title 5 of the California Code of Regulations contains standards related to the construction of school facilities. Section 14010 of the code requires school districts to select a school site that:

- Is setback from power line easements as follows:
    - 100 feet for 50 – 133 kilovolt (kV) lines, 150 feet for 220 – 230 kV lines, and 350 feet for 500 – 550 kV lines (5 CCR §14010 c)
- Is safe from railroad-related hazards, including derailment (5 CCR §14010 d)
- Is not located near an above ground water or fuel storage tank (5 CCR §14010 h)
- Is not located within 1,500 feet of the easement of an above ground or underground pipeline that can pose a safety hazard (5 CCR §14010 h)
- Is located within 2,000 feet of a significant hazardous waste disposal site the proposed attendance area to encourage student walking and avoid extensive bussing (5 CCR §14010 l)

8.2.3 California Education Code

Section 17213 of the California Education Code sets forth certain requirements for a school district acquiring a school site. In general, the Education Code requires a school district to determine the property to be purchased or to be built upon is not any of the following:

- The site of a current or former hazardous waste disposal site
- A hazardous substance release site identified by the Department of Toxic Substances Control for removal or remedial action
- A site that contains one or more pipelines that carries hazardous substances, extremely hazardous substances, or hazardous wastes

In addition, section 17213 requires a school district to consult with the administering agency in which the school site is located to identify both permitted and nonpermitted facilities with the agency's authority within one-fourth of a mile of the proposed school site that might reasonably be anticipated to emit hazardous air emissions or to handle hazardous or extremely hazardous materials, substances, or waste.

8.2.4 DTSC Control School Property Evaluation and Cleanup Division

DTSC's School Property Evaluation and Cleanup Division is responsible for assessing, investigating and cleaning up proposed school sites. The Division ensures that selected properties are free of contamination or, if the properties were previously contaminated, that they have been cleaned up to a level that protects the students and staff who will occupy the new school. All proposed school sites that will receive State funding for acquisition or construction are required to go through a rigorous environmental review and cleanup process under DTSC's oversight. School districts conduct environmental assessments to provide basic information for determining if there has been a release of hazardous material at the sites, or if a naturally occurring hazardous material that presents a risk to human health or the environment may be present. Outreach activities integrated into the process allow a more active role for stakeholders in the selection process for school sites. Through the environmental review process, DTSC ensures protection of children, staff and the environment from the potential effects of exposure to hazardous materials.

8.2.5 Bay Area Air Quality Management District (BAAQMD)

BAAQMD Regulation 11, Hazardous Air Pollutants, Rule 2, Asbestos Demolition, Renovation, and Manufacturing, is intended to control emissions of asbestos to the atmosphere during demolition activities. The rule requires the inspection for, and removal of, asbestos-containing building materials prior to demolition and to implement procedures for preventing emissions of asbestos for asbestos-containing building materials that cannot be removed (e.g., asbestos-containing concrete).

8.3 PROJECT IMPACTS AND MITIGATION MEASURES

Consistent with CEQA and the CEQA Guidelines, Appendix G, this EIR focuses on the potentially significant direct and indirect impacts that could result from implementation of the Menlo Park Small High School Project, as described in Chapter 2. The SUHSD has determined that, based on the characteristics of the project and the environmental conditions described in 8.1, the proposed project:

- Does not have the potential to create a significant hazard to the public or the environment from being located on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 (the Cortese List). Although the proposed school property has been subject to DTSC regulatory oversight, it is not a site listed pursuant to Government Code section 65962.5 by the DTSC. The project site does not contain any historic or current leaking underground storage tank sites, does not contain any historic or current DTSC State Response, Federal Superfund, or Certified with Operation and Maintenance sites, and does not contain any other historic or current solid waste disposal, cease and desist or cleanup and abatement order, or corrective action sites (CalEPA 2012a, 2012b, 2016). Furthermore, DTSC has determined that the release or potential release of a hazardous material from the proposed site would not pose a threat to human health or the environment.
- Does not have the potential to expose students or faculty/staff working at the school to airport-related safety hazards because the proposed School Site is not located within an airport land use plan or within two miles of a public or private airport. The nearest airport to the proposed project site is the Palo Alto Airport, approximately three and a half miles southeast of the proposed school site at its nearest location
- Does not have the potential to impair implementation of or physically interfere with an emergency response or evacuation plan because the SUHSD has coordinated with the City of Menlo Park Fire Department and incorporated changes into the project, such as 26-foot-wide drive aisles and a ladder truck staging area, that are intended to support emergency access to the site.
- Does not have the potential to expose people or structures to significant risk or loss of injury or death involving wildland fires because the project is located in an urbanized area and there are no wildlands at or in the vicinity of the proposed School Site.
- Does not have the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing school because there are no schools located within one-quarter mile of the project area. The risks to new students and staff are discussed below in section 8.3.2.

For these reasons, these issues are not discussed further in this EIR. The potentially significant impacts that could result from implementation of the proposed project are described in section 8.3.1 below.

8.3.1 Thresholds of Significance

Based on CEQA Guidelines Appendix G, the proposed project would have a significant environmental impact related to hazards and hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- 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; or
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of a proposed school.

8.3.2 Potential Impacts from Hazards and Hazardous Materials

The proposed Menlo Park Small High School Project has a low potential to create a hazard to the public and the environment from construction and operational activities. Once constructed, the proposed project would also be located within 1,500 feet of railroads, pipelines, and other facilities that could pose a risk to the school and its students, faculty.

Impact HAZ-1: Construction and operation of the Menlo Park Small High School could result in the release or potential release of hazardous materials that pose a risk to human health and/or the environment.

As described in 8.1.2, the PEA prepared for the project determined that the presence of chemicals such as lead and VOCs in site soils, soil vapor, and groundwater do not pose a risk to human health and the environment and, therefore do not require further investigation or remedial action. On June 13, 2016, the DTSC approved the PEA and found no further investigation or remediation of the site is required (DTSC 2016, see Appendix G3). In its "No Further Action" letter, the DTSC noted that SUHSD is required to stop construction activities and notify the DTSC in the event previously unidentified hazardous materials are discovered during project construction. The SUHSD considers the discovery of unanticipated contamination unlikely given the fact that soil, soil vapor, and groundwater sampling conducted as part of the site investigation process adequately covered the site. Nonetheless, the release of previously unidentified contamination could result in a potentially significant impact. To reduce the potential for project construction to disturb and release unanticipated contamination, the SUHSD would implement Mitigation Measure HAZ-1A below.

In addition, the existing on-site building may contain lead paint or asbestos-containing building materials. Thus, the demolition of the building could lead to the release of asbestos or lead in the form of dust, storm water runoff, or track-out. To reduce the potential for demolition activities to disturb and release lead paint and asbestos-containing building materials, the SUHSD would implement Mitigation Measure HAZ-1B below.

Finally, the use of heavy construction equipment has the potential to result in leaks of fuels, oils, and lubricants that could contaminate soil or storm water. To reduce the potential for construction equipment to leak or otherwise release hazardous fluids into the environment, the SUHSD would implement Mitigation Measures HAZ-1C below.

Mitigation Measure HAZ-1A: Minimize and Avoid Impacts from Unanticipated Hazardous Materials

In accordance with the California Department of Toxic Substances Control's (DTSC) "No Further Action" letter issued for the Menlo Park Small High School Project Preliminary Environmental Assessment, and Education Code 17213.2(e), in the event unanticipated contamination or hazardous materials are discovered during project construction (e.g., gasoline odors, or oily soil or water), the SUHSD shall:

- Stop all work immediately, contact the DTSC and, in coordination with the DTSC, take appropriate investigative and/or remedial action to adequately characterize the contamination and ensure the release or potential release of hazardous materials would not pose a significant threat to human health and/or the environment.
- Construction may proceed if, after coordinating with the DTSC, it is determined activities would not affect the release or potential release of a hazardous material.

Mitigation Measure HAZ-1B: Minimize and Avoid Impacts from Lead Paint and Asbestos-Containing Building Materials

Prior to the start of any building demolition activity, the SUHSD shall:

- Hire a qualified inspector(s) to survey the building for potential lead paint and asbestos containing materials.
  - If lead or asbestos are found, the SUHSD shall remove the materials from the building to the extent feasible and in accordance with all applicable regulations, such as Bay Area Air Quality Management District (BAAQMD) Regulation 11, Rule 2, Asbestos Demolition, Renovation, and Manufacturing.
  - If it is not feasible to remove or strip materials out of the building (e.g, asbestos containing concrete), the District shall ensure emissions of lead and /or asbestos are captured and prevented from being released into the outside air by sufficiently wetting the material, providing HEPA exhaust, ventilation, collection of emissions, or other equivalent method.
- Ensure lead and asbestos containing materials are properly disposed of and transported to an appropriate waste disposal facility
- Submit a written plan or notification of intent to demolish the structures at 150 Jefferson Drive to the BAAQMD at least 10 working days prior to the start of demolition activities, in accordance with BAAQMD Regulation 11, Rule 2.

Mitigation Measure HAZ-1C: Minimize and Avoid Impacts from Equipment Leaks and Spills

The District shall minimize and avoid potential leaks and spills from heavy construction equipment used during demolition, site preparation, and building construction activities by:

- Designating vehicle and equipment storage, staging, and clean-up locations.
- Designating equipment fueling locations and ensuring appropriate spill containment measures and spill response equipment is on-site.
- Inspecting equipment for leaks prior to and at the conclusion of daily construction activities. If leaks are observed, the leaking equipment shall be repaired immediately. All contaminated water, sludge, spill residue, or other hazardous compounds discovered during inspections shall be contained and disposed of, as necessary, at lawfully permitted or authorized disposal sites.

Mitigation Measures HAZ-1A, HAZ-1B, and HAZ-1C would avoid or reduce the potential for construction activities to release quantities of hazardous materials that could pose a significant risk to human health and/or the environment. Thus, with these measures, Impact HAZ-1 would be rendered a less than significant impact.

Once constructed, the proposed Menlo Park Small High School Project would not create a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials, nor through a reasonably foreseeable upset or accident condition. The new, small high school would use or store minor amounts of oils, lubricants and fuels that would not present a significant hazard to the public or the environment, and the facilities would not produce hazardous emissions or handle acutely hazardous materials, substances, or waste.

Impact HAZ-2: The proposed Menlo Park Small High School is located near railroads, pipelines, and other facilities that would pose a less than significant risk to the school.

The proposed Menlo Park High School is located within 1,500 feet of one railroad track, one high pressure natural gas pipelines, and ten water pipelines greater than or equal to 12-inches in diameter. The proposed school site is also located adjacent to an engineering and scientific consulting firm specializing in the investigation of accident incidents and failure analyses. As described below, these facilities are unlikely to pose a risk or hazard to the school or its students and faculty/staff.

Railroads

At its closest point, The Dumbarton Rail Corridor is located approximately 935 feet southwest of the proposed Menlo Park Small High School. This rail corridor was historically used primarily for freight rail service; however, the segment of the corridor near the proposed school site has been closed for decades. In 2012, the San Mateo County Transportation Authority began preparation on an Environmental Impact Statement / EIR evaluating reactivation of the rail corridor for commuter rail service, but the project was put on indefinite hold due to a lack of funding (City of Menlo Park 2016). SamTrans is currently evaluating potential improvements to the rail corridor with the intent to identify improvement alternatives, funding, and phasing by April 2017, but has no defined plans at this point in time (SamTrans 2016). Accordingly, the likelihood of there being future train traffic along the segment of the Dumbarton Rail Corridor near the proposed Menlo Park Small High School remains low, and the nature of such service is speculative at this point in time.

Pipelines

One high pressure natural gas pipeline is located within 1,500 feet of the proposed Menlo Park Small High School (see section 8.1.5). As described below, the Pipeline Safety Hazard Assessment prepared for the proposed project evaluated the risks associated with the rupture or release of natural gas from this pipeline and determined these risks would be below the criterion established by the California Department of Education (PlaceWorks 2015, see Appendix G4).

The Stage 2 Risk Analysis conducted for the project calculated the total individual fatality risk for the 20-inch PG&E pipeline (located 75 feet from the proposed School Site) to be 1.3×10^{-9}, which is less than the one in one million (1.0×10^{-6}) total individual risk criterion used by the California Department of Education. Therefore, the risk from this pipeline is a less than significant. The Pipeline Safety Hazard Report calculated a total individual risk ratio for the nearest property boundary to the pipeline of 0.00[18].

In addition to gas and petroleum pipeline risks, the Pipeline Safety Hazard Analysis also evaluated potential flooding risks from water pipelines with a diameter greater than 12-inches (see section 8.1.5). The analysis found that for the five pipelines located within 1,500 feet of the proposed School Site the flood waters would be contained within the confines of the street curbing and would not impact the proposed School Site.

[18] The California Department of Education does not maintain significance thresholds for these values, which are used by the Department as guidelines to determine the relative potential risk at the school site.

In summary, the Pipeline Safety Hazard Assessment prepared for the project indicates there is a less than significant risk of a pipeline failure or other release impacting the proposed School Site and its students, faculty, and staff. Nonetheless, the Pipeline Safety Hazard Assessment recommends the SUHSD plan for such scenarios. Accordingly, the SUHSD would implement Mitigation Measure HAZ-2 below, which requires the proposed Menlo Park Small High School to appropriately plan for pipeline-related emergencies.

Exponent Engineering

A records search and site visit of the Exponent facilities located at 149 Commonwealth Drive and 160 Jefferson Drive indicate the facility would not pose a significant risk to the proposed Menlo Park Small High School. The SUHSD has designed the proposed school so that most outdoor areas are located between a school building and Jefferson Drive, away from the Exponent facilities. In addition, the positive pressure created when a heating, ventilation, and air conditioning (HVAC) system is on limits the intrusion of ambient air into the buildings. Finally, the SUHSD is proposing the use of an HVAC system capable of supporting a filtration system with a minimum efficiency rating value (MERV) of 13, which filters 90 percent of particles greater than one micron in size (the standard filtration MERV is 8, which filters 85% of particles greater than 3 microns in size). These measures limit potential exposure to airborne contaminants that may be released from all nearby facilities, and would result in a less than significant risk to the proposed school.

8.4 REFERENCES

California Department of Toxic Substances Control (DTSC) 2010. *Hazardous Waste.* DTSC, Safeguarding Communities, Hazardous Waste. October 26, 2015. Web. 2010. <http://www.dtsc.ca.gov/HazardousWaste/index.cfm>

_____ 2015. *Environmental Oversight Agreement, Docket Number HAS-FY15/16-049, 150 Jefferson Drive (AKA Menlo Park Proposed School), Sequoia Union High School District (Site Code: 204273-11).* October 29, 2015. Sacramento, CA.

_____2016. *Approval of the Preliminary Environmental Assessment Report, Sequoia Union High School District, Menlo Park Proposed School (A.K.A. Menlo Park Small High School Project), 150 Jefferson Drive, Menlo Park, San Mateo County (Project Code 204273).* Letter from Jose Salcedo, P.E., Chief, DTSC Northern California Schools Unit to Dr. James Lianides, Superintendent, SUHSD June 13, 2016. Sacramento, CA.

_____2016b. EnviroStor Database Search for 150 Jefferson Drive, Menlo Park, CA. Map. May 27, 2016. <http://www.envirostor.dtsc.ca.gov/public/>

California Environmental Protection Agency (CalEPA) 2012a. "Sites Identified with Waste Constituents Above Hazardous Waste Levels Outside the Waste Management Unit." <http://www.calepa.ca.gov/SiteCleanup/CorteseList/>

_____2012b. "List of 'Active' Cease and Desist and Cleanup and Abatement Orders from Water Board." < http://www.calepa.ca.gov/SiteCleanup/CorteseList/>

_____2016. "Cortese List: Section 65962.5(a)". *Cortese List: Section 65962.5(a)*. Cal/EPA, Programs, Site Cleanup, Cortese List, Background and History, Detailed explanation of Subsection 65962.5. (a). 2016. Web. July 3, 2016. <http://www.calepa.ca.gov/SiteCleanup/CorteseList/SectionA.htm>

Cornerstone Earth Group (Cornerstone). 2014. *Phase I Environmental Site Assessment 150 Jefferson Drive, Menlo Park, California.* Prepared by Cornerstone. for the SUHSD. Redwood City, CA. November 2014.

_____2016. *Preliminary Environmental Assessment Report, Menlo Park Small High School Project, 150 Jefferson Drive, Menlo Park, California (Site Code: 204273)*. Prepared by Cornerstone Earth Group for the SUHSD. Redwood City, Ca. May 2016.

PlaceWorks 2015. *Pipeline Safety Hazard Assessment New School Site in Menlo Park.* Prepared by PlaceWorks for the Sequoia Union High School District. January 2015.

State Water Resources Control Board (SWRCB) 2016. GeoTracker Database Search for 150 Jefferson Drive, Menlo Park, CA. Map. May 27, 2015. <http://geotracker.waterboards.ca.gov/>

This page intentionally left blank

CHAPTER 9 HYDROLOGY AND WATER QUALITY

9.1 ENVIRONMENTAL SETTING

Dry, mild summers and moist, cool winters characterize San Mateo County's overall climate. Bayside climates such as that in project area are generally warm and sunny, particularly in the summer months when hot air from the valleys moving to the east warms the prevailing cool ocean breezes. Average annual temperatures are about 58-59 degrees Fahrenheit with temperatures deviating about 12-13 degrees Fahrenheit. About 74% of the total annual precipitation in San Mateo County occurs from December through March. During this wet season, precipitation levels average from approximately 3.1 to 4.3 inches per month (San Mateo County 1986), although drought conditions have prevailed in recent years.

9.1.1 Local Watershed

The proposed school site (150 Jefferson Drive) is located within the South San Francisco Bay Basin watershed, approximately 0.25 miles inland from the South Bay Salt Ponds and 1.25 miles inland from the Lower San Francisco Bay. The approximately 2.1-acre site is generally flat and is void of any natural surface water features. Major surface waters in the vicinity of the project include Atherton Channel (also known as Atherton Creek, approximately 0.5 miles to the north of the site), Flood Slough (approximately 0.25 miles east of the site), and the Lower San Francisco Bay. The Atherton Channel is an alternating earth- and concrete-lined channel that carries flow from the upper reaches of Atherton Creek to Flood Slough. Flood Slough is one of several sloughs that run through the salt ponds and salt marshes north of the Bayfront Expressway, and it drains into the Bay. Levees are located throughout the salt ponds. The U.S. Environmental Protection Agency (USEPA) has classified San Francisco Bay as a 303(d)-listed impaired water body due to high levels of numerous contaminants, trash, and invasive species (SWRCB 2010).

9.1.2 Site Hydrology

The proposed school site is currently developed. The site is mostly paved and consists of 86.3% impervious surfaces (LPA 2016); pervious surface areas where infiltration can occur is limited to landscaped areas on the property frontage along Jefferson Drive and on the northern and southern property borders.

Drainage and Storm Water Systems

The proposed school site is located in the northern drainage area of the City of Menlo Park. All surface drainage flows in this area ultimately discharge to the Lower San Francisco Bay. Storm water from the project site is collected via the street network at Jefferson Drive and conveyed via an existing 36-inch storm drain leading to the Bay. Site elevations range from approximately 5.5 to 6.6 feet above mean sea level (Dains Land Surveying 2016).

Groundwater

The project site is located within the San Mateo subbasin of the Santa Clara Valley groundwater basin. The San Mateo subbasin is bounded by the Santa Cruz Mountains to the west, the Bay to the east, San Francisquito Creek to the south, and the Westside Groundwater Basin to the north. The subbasin's underlying water bearing formations include Quaternary and Plio-Pleistocene alluvial deposits composed of gravel, sand, silt, and clay. A relatively shallow water table aquifer overlies confined and semi-confined aquifers near the margins of the Bay, with most wells drawing from the deeper deposits. The direction of groundwater flow is generally to the north.

Recharge of the San Mateo subbasin occurs through infiltration into stream beds and through infiltration of precipitation on the valley floor. Little is known about the actual storage capacity of the subbasin or existing groundwater levels, but it is estimated that groundwater levels have rebounded somewhat since the early twentieth century when groundwater was used as the primary source for drinking and irrigation.

Geotechnical investigations and soil borings at the proposed school site indicate groundwater is relatively shallow; borings generally encountered groundwater at depths ranging from 6.5 to 16 feet below existing grade (Cornerstone 2014a, 2014b). Fluctuations in ground water levels occur due to many factors including seasonal fluctuation, underground drainage patterns, regional fluctuations, and other factors. The California Geological Survey indicates that the depth to historic high ground water in the project is on the order of five feet below ground surface (CGS, 2006).

Flooding

Based on the Federal Emergency Management Agency (FEMA) flood map database, Community Panel #06081C0308E, 150 Jefferson Drive is located within Zone X. This zone is defined as an area of 0.2 percent annual chance of flood (the 500-year flood), an area subject to a one percent chance flood (100-year flood) with average depths of less than 1 foot, or areas protected by levees from a one percent annual chance of flood (FEMA 2012). The areas immediately adjacent to the proposed school site are located within the 100-year floodplain, including portions of U.S. 101 and properties on Jefferson Drive located across the street from 150 Jefferson Drive.

Areas within the 100-year flood hazard area are subject to 100-year flood, which means that in any given year, the risk of flooding in the designated area is 1 percent. Areas within the 500-year flood hazard area are subject to 500-year flood, which means that in any given year, the risk of flooding is 0.2 percent. In the future, risks from flooding may increase as ocean and Bay levels rise as a result of climate change. According to the National Oceanic and Atmospheric Administration (NOAA) online Sea Level Rise and Coastal Flooding Impact Viewer, the project site would be subject to inundation with a 3-foot rise in sea level (expected to occur sometime after the year 2050 but before the year 2100 based on current projections). Sea level rise in combination with high tide events produce the most near-term damage from flooding. The Bay Conservation and Development Commission (BCDC) and other local agencies are in the process of developing and implementing mitigation and adaptation strategies to reduce the potential for these flood risks.

Risks from Dam Failure, Tsunamis, Seiches, and Mudflows

According to the San Mateo County Dam Failure Inundation Areas map, 150 Jefferson Drive is not located within a dam failure inundation area (San Mateo County, 2005). Similarly, according to the State of California Tsunami Inundation Map for Emergency Planning (Redwood Point Quadrangle/Palo Alto Quadrangle), 150 Jefferson Drive is not located within a tsunami inundation area. There are no large bodies of water, such as reservoirs or lakes, within the City and thus there is no risk from a seiche. The project site, and the majority of the City of Menlo Park, is flat and not subject to risk of mudflows or debris slides.

9.2 REGULATORY SETTING

9.2.1 Federal Clean Water Act

The primary federal law regulating water quality is the Clean Water Act (CWA), administered by the USEPA. The purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters through prevention and elimination of pollution.

The CWA applies to discharges of pollutants into Waters of the U.S.[19] The CWA establishes a framework for regulating storm water discharges from municipal, industrial, and construction activities under the National Pollutant Discharge Elimination System (NPDES). The CWA sections most relevant to this analysis are summarized below. In some instances, the USEPA delegates its authority for implementing the CWA in California to the State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCB).

- Section 303(d) of the CWA requires states, territories, and authorized tribes to develop a list of water bodies that are considered to be "impaired" from a water quality standpoint. Water bodies that appear on this list do not meet water quality standards even after the minimum required levels of pollution control technologies have been implemented to reduce point sources of pollution. In turn, the law requires that respective jurisdictions (i.e., RWQCBs) establish priority rankings for surface water bodies on the list and develop action plans, referred to as total maximum daily loads (TMDLs), to improve water quality. The California SWRCB publishes the list of water-quality limited segments in California.
- Section 402 of the CWA establishes the NPDES permit program to regulate the discharge of pollutants from point sources. The CWA defines point sources of water pollutants as "any discernable, confined, and discrete conveyance" that discharges or may discharge pollutants. These are sources from which wastewater or storm water is transmitted in some type of conveyance (pipe and channel) to a water body; they are classified as municipal or industrial. Municipal point sources consist primarily of domestic treated sewage and processed water, including municipal sewage treatment plant outfalls and storm water conveyance system outfalls. These outfalls contain harmful substances that are emitted directly into Waters of the U.S. Without a permit, the discharge of pollutants from point sources into Waters of the U.S. is prohibited. NPDES permits require regular

[19] For purposes of the Clean Water Act, "Waters of the United States" means:
(a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
(b) All interstate waters, including interstate "wetlands";
(c) All other waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) Which are used or could be used for industrial purposes by industries in interstate commerce;
(d) All impoundments of waters otherwise defined as waters of the United States under this definition;
(e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;
(f) The territorial sea; and
(g) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition

water quality monitoring. Assessments must be completed to ensure compliance with the permit standards.

In 1990, the U.S. EPA promulgated regulations for permitting storm water discharges from industrial sites (including construction sites that disturb five acres or more) and from municipal separate storm sewer systems (MS4s) serving a population of 100,000 people or more. These regulations, known as the Phase I regulations, require operators of medium and large MS4s to obtain storm water permits. On December 8, 1999, U.S. EPA promulgated regulations, known as Phase II regulations, requiring permits for storm water discharges from Small MS4s and from construction sites disturbing between one and five acres of land.

- A Small MS4 is an MS4 that is not permitted under the municipal Phase I regulations (40 CFR §122.26(b)(16)). Small MS4s include systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares, but do not include separate storm sewers in very discrete areas, such as individual buildings. (40 CFR§122.26(b)(16(iii).) This permit refers to MS4s that operate throughout a community as "Traditional MS4s" and MS4s that are similar to traditional MS4s but operate at a separate campus or facility as "Non-traditional MS4s."
- Federal regulations allow two permitting options for storm water discharges: individual permits and general permits. The SWRCB elected to adopt a statewide general permit for Small MS4s in order to efficiently regulate numerous storm water discharges under a single permit. The existing General Permit (Water Quality Order 2003-0005-DWQ) was adopted by the SWRCB in April 2003 for a 5-year permit term. The existing General Permit expired in May 2008; however, it continues in force and in effect until rescinded by the SWRCB, or until a new Order is issued. The Order regulates storm water runoff from small municipalities and other facilities, including federal and State operated facilities that can include universities, prisons, hospitals, military bases (e.g. State Army National Guard barracks, parks and office building complexes.). All MS4s have to prepare a Storm Water Management Plan (SWMP) containing detailed BMPs and specific level-of-implementation information reviewed and approved by the permitting agency before the Permittee obtains coverage under the General Permit.
- San Mateo County is a traditional MS4 with an existing SWMP. The discharge of storm water from areas within San Mateo County is permitted by the San Mateo Countywide Water Pollution Prevention Program's (SMCWPPP) NPDES Permit. The permit allows the County and all cities within the County to discharge storm water into San Francisco Bay and the Pacific Ocean. The NPDES permit requires both construction and post-construction storm water control.

9.2.2 California Porter-Cologne Water Quality Control Act

Division 7 of the California Water Code is the basic water quality control law for California. This law is titled the Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The Porter-Cologne Act establishes a regulatory program to protect water quality and to protect beneficial uses of state waters. The implementation of the Porter-Cologne Act is principally characterized in each RWQCB's Water Quality Control Plan (Basin Plan). A Basin Plan is a master policy document for managing surface and groundwater quality throughout each respective region. These Basin Plans set forth the water quality criteria by which all waters of the

state within the Region are measured. “Waters of the state” means any surface water or groundwater, including saline waters, within the boundaries of the state.

The proposed school site is under the jurisdiction of the San Francisco Bay RWQCB. The current Basin Plan for the San Francisco Bay RWQCB includes amendments through March 2015.

9.2.3 California Construction General Permit

As discussed above, the USEPA has delegated regulatory authority for the NPDES program to state and regional water boards. The SWRCB Division of Water Quality (DWQ) has issued a general permit for storm water discharges from construction activity, applicable to any project that would disturb more than one acre of land. The SWRCB adopted NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ on September 2, 2009 and amendment No. 2010-0014-DWQ on November 16, 2010. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must list best management practices (BMPs) the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

9.2.4 San Francisco Bay RWQCB Municipal Regional Storm Water Permit

Operation of the project would be subject to the San Francisco Bay RWQCB’s Municipal Regional Storm Water NPDES Permit (MRP), implemented in October 2009 by Order R2-2009-0074. Provision C.3 of the MRP requires new development and redevelopment projects that create and/or replace 10,000 square feet or more of impervious surface area to include appropriate source control, site design, and storm water treatment measures to address both soluble and insoluble storm water runoff pollutant discharges and prevent increases in runoff flows. This is generally accomplished through the implementation of low impact development (LID) techniques.

9.2.5 San Mateo Countywide Water Pollution Prevention Program

The SMCWPPP is a partnership of the City/County Association of Governments (C/CAG), which consists of the County of San Mateo and each incorporated city and town in the county. The municipalities that are part of C/CAG share a common MS4 permit. Each municipality in San Mateo County is responsible for implementing a storm water program in compliance with MS4 permit requirements to prevent discharges of polluted storm water runoff from its streets into the local storm drain system and nearby surface waters. The permit prescribes how each local municipality will regulate new and redevelopment projects, conduct its municipal maintenance activities, eliminate non-stormwater discharges, inspect businesses to control stormwater pollutants, and encourage the public's help in preventing pollution.

9.2.6 California Government Code Section 53097

Although a school district is not required to comply with the provisions of a city or county zoning ordinance, California Government Code Section 53097 does specify that school districts shall comply with any city or county ordinance (1) regulating drainage improvements and conditions, (2) regulating road improvements and conditions, or (3) requiring the review and approval of grading plans as these ordinance provisions relate to the design and construction of on site improvements which affect drainage, road conditions, or grading. Therefore, the proposed

project would be required to comply with the applicable provisions of the City of Menlo Park's regulating drainage improvements (see sections 9.2.7 and 9.2.8).

9.2.7 City of Menlo Park Municipal Code / Storm Water Management Program

Title 7, Health and Sanitation, Chapter 7.42, Storm Water Management Program, of the Menlo Park Municipal Code is intended to ensure the future health, safety, and general welfare of Menlo Park citizens by controlling and reducing pollutant discharges to the municipal storm water system. The municipal code prohibits non-storm water discharges to the storm sewer system (Municipal Code Section 7.42.080), although irrigation water and certain other discharges are exempted from this prohibition (Municipal Code Section 7.42.090). Municipal Code Section 7.42.120 states that "Any person engaged in activities which will or may result in pollutants entering the town storm sewer system shall undertake all practicable measures to reduce such pollutants.[20]" Pollution prevention measures include litter prevention, frequent cleaning of parking lots, and best management practices for new developments and redevelopments. To meet the requirements of this code section, the City requires a Grading and Drainage Plan whenever a building project will change more than 500 square feet of the surface of a lot from pervious to impervious. The SUHSD is not a person as defined by this part of the Menlo Park Municipal Code. Therefore, the provisions of this Menlo Park code section do not apply to the SUHSD or the project.

9.2.8 City of Menlo Park Municipal Code / Storm Water Management Program

Title 12, Buildings and Construction, Chapter 12.42, Flood Damage Prevention, of the Menlo Park Municipal Code is intended minimize public and private losses due to flood conditions in special flood hazard areas, including areas shown on a FEMA Flood Insurance Rate Map as Zone A, AO, A1-A30, AE, A99, AH, E, M, V1-V30, VE or V (Municipal Code Section 12.42.20 (51) and 12.42.31). The proposed school site is located in Zone X and is therefore not subject to the provisions of this Menlo Park code section.[21]

9.2.9 City of Menlo Park General Plan

The following policies from the City of Menlo Park's General Plan Safety Element are relevant to the proposed project:

- Erosion and Sediment Control. Continue to require the use of best management practices for erosion and sediment control measures with proposed development in compliance with applicable regional regulations (Policy S1.26).
- Regional Water Board Requirements. Enforce storm water pollution prevention practices and appropriate watershed management plans in the Regional Water Board general NPDES requirement, the San Mateo County Water Pollution Prevention Program and the City's Storm Water Management Program. Revise, as necessary, City plans so they

[20] Per Section 1.04.010 of the Menlo Park Municipal Code, the term person "means natural person, joint venture, joint stock company, partnership, association, club, company, corporation, business, trust, organization, or the manager, lessee, agent, servant, officer or employee of any of them".

[21] Per Section 12.42.20 of the Menlo Park Municipal Code, the term person "means an individual or his agent, firm, partnership, association or corporation, or agent of the aforementioned groups, or this state or its agencies or political subdivision". Thus, the requirements of this code section would apply to the SUHSD if the project were located in a special flood hazard area.

integrate water quality and watershed protection with water supply, flood control, habitat protection, groundwater recharge, and other sustainable development principles and policies (Policy S1.27).

9.3 PROJECT IMPACTS AND MITIGATION MEASURES

Consistent with CEQA and the CEQA Guidelines, this EIR focuses on the potentially significant direct and indirect impacts that could result from implementation of the proposed, as described in Chapter 2. The SUHSD has determined, based on the characteristics of the proposed project and the environmental conditions described in section 9.1, that:

- The Menlo Park Small High School Project would not violate any water quality standards or waste discharge requirements because it would comply with all applicable regulations to protect water quality. The SUHSD would prepare a SWPPP with BMPs to protect water quality during construction, and the proposed project would include site design and storm water control and treatment measures consistent with the SMCWPP (see section 2.1.6).
- The Menlo Park Small High School Project does not have the potential to substantially deplete ground water supplies or interfere with groundwater recharge because the project would reduce impervious surface area at the project site by approximately eight percent as compared to existing conditions (LPA 2016).
- The Menlo Park Small High School Project does not have the potential to substantially alter the existing drainage pattern of the project site or surrounding area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion, siltation, or flooding. The proposed project would replace existing structures and reduce existing impervious surfaces at the site by approximately eight percent, and the proposed site design includes approximately 2,850 square feet of bio-filtration areas (equal to approximately 3.1 percent of the lot area) to control and treat on-site storm water flows.
- The proposed project would not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. The proposed school site would reduce the amount of impervious surfaces at 150 Jefferson Drive by approximately eight percent and thus reduce storm water run-off volume and peak flow rates as compared to existing conditions.
- The Menlo Park Small High School Project does not have the potential to otherwise substantially degrade water quality because the proposed project would replace existing structures and reduce existing impervious surfaces at the site by approximately eight percent, and the proposed site design includes approximately 2,850 square feet of bio-filtration areas (equal to approximately 3.1 percent of the lot area) to control and treat on-site storm water flows.
- The Menlo Park Small High School Project does not involve the construction of housing units and therefore would have no potential to place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or FIRM or other flood hazard delineation map.
- The Menlo Park Small High School Project does not have the potential to place structures within a 100-year flood hazard area which could impede or redirect flood flows because the project site is located within Zone X, an area outside the 100-year flood hazard area (FEMA 2012).

- The proposed project does not have the potential to expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of dam or levee failure, because the project site is not located within a flood hazard area or dam inundation zone (Cornerstone 2014a and 2014b, ABAG 2016).
- The proposed project does not have the potential to expose people or structures to inundation by seiche, tsunami, or mudflow because the project site is not located within a seiche or tsunami hazard zone and does not contain slopes where mudflows could occur (Cornerstone 2014, ABAG 2016).

The potentially significant impacts that could result from implementation of the proposed project are described in section 9.3.2 below.

9.3.1 Thresholds of Significance

Based on CEQA Guidelines Appendix G, the implementation of the proposed project would have a significant environmental impact related to hydrology and water quality resource, if it would:

- Expose people or structures to a significant risk of loss, injury or death involving sea level rise.

9.3.2 Potential Impacts Involving Sea Level Rise

As described in section 9.1.2, 150 Jefferson Drive is not located within a special flood hazard zone; however, future risks of flooding may increase as ocean and Bay levels rise as a result of climate change. Thus, although the project site is not located within a 100-year flood zone, the proposed school may be subject to flooding in the future. The base flood elevation at the project site is 7.25 feet above mean sea level.

Impact HYD-1: The proposed project is at risk of future inundation / increased flood levels associated with sea level rise.

There is strong scientific consensus regarding the effects of climate change, including sea level rise; however, there are a wide range of estimates for how California's coastlines will be affected by sea level rise. The National Oceanic and Atmospheric Administration (NOAA) and the Bay Conservation and Development Commission predict San Francisco Bay levels will rise 10 to 17 inches by 2050, 17 to 32 inches by 2070, and 55 to 69 inches by the end of the century if current trends continue. The Coastal and Ocean Working Group of the California Climate Action Team (CO-CAT) developed its *State of California Sea-Level Rise Guidance Document*, for state agencies in incorporating sea level rise into planning and decision making for projects in California. The document was developed in response to Governor Schwarzenegger's Executive Order S-13-08, issued on November 14, 2008, which requires all state agencies planning construction projects in areas vulnerable to sea level rise to consider a range of sea level rise scenarios for the years 2050 and 2100. In the CO-CAT sea level rise guidance document, three sea level rise projections were selected for California, using year 2000 as a baseline: 2 to 12 inches by 2030, 5 to 24 inches by 2050, and 17 to 66 inches by 2100. To reduce the potential impacts associated with future flood risks associated with climate change and sea level rise, the District would implement Mitigation Measure HYD-1, Raise Building Elevations above Base Flood Elevations.

Mitigation Measure HYD-1: Raise Final Building Locations above Base Flood Elevations

To reduce potential flooding impacts and inundation from sea level rise, the District shall raise the lowest finish floor elevation of all buildings at least one foot above the existing base flood elevation.

Mitigation measure HYD-1 requires the District to raise the project site one foot above the existing base flood elevation, or to approximately 8.25 feet above mean sea level. This one foot raise would accommodate an approximate 12-inch rise in flood levels associated with sea level rise by mid-century (i.e., approximately 2050), which is anticipated to be the useful life of the project. The one foot raise may not protect the site against future floods should worst case scenario projections for sea level rise occur by mid-century (two feet); however, it does provide a reasonable level of protection for the project. Even if worst-case scenarios were to occur, increased flooding risks would be unlikely to result in injury or death due to the expected progression in sea level rise and the fact that students and staff are not likely to be at the site should a major flood event be predicted. Thus, raising the site one-foot above present day base flood elevations is considered to be effective mitigation for project against sea level rise until the end of its useful life, and Impact HYD-1 would be rendered a less than significant impact.

9.4 REFERENCES

Association of Bay Area Governments (ABAG), 2016. Tsunami Planning Areas. Available online at: http://gis.abag.ca.gov/, accessed February 26, 2016.

Coastal and Ocean Resources Working Group for the Climate Action Team (CO-CAT), 2013. State of California Sea-Level Rise Guidance Document. Available at: http://www.opc.ca.gov/2010/07/coastal-and-ocean-climate-action-team-co-cat/, accessed May 19, 2016.

California Department of Water Resources. 2003. California's Groundwater—Bulletin 118, Update 2003, San Francisco Bay Hydrologic Region. Available at: http://www.water.ca.gov/pubs/groundwater/bulletin_118/california's_groundwater__bulletin_118_-_update_2003_/bulletin118_2-sf.pdf, accessed February 29th, 2016.

The California Emergency Management Agency (CalEMA), the University of Southern California (USC), and the California Geological Survey (CGS), 2009. Tsunami Inundation Map For Emergency Planning. State of California, County of San Mateo. Redwood Point Quadrangle/Palo Alto Quadrangle. June 15.

Cornerstone Earth Group, 2014a (December). Preliminary Geotechnical Investigation. 150 Jefferson Drive, Menlo Park, California.

Cornerstone Earth Group, 2014b (December). Soil, Soil Vapor and Groundwater Quality Evaluation. 150 Jefferson Drive, Menlo Park, California.

Federal Emergency Management Agency (FEMA), 2012. Flood Insurance Rate Map, San Mateo County, California, and unincorporated areas, Panel Number 308 of 510, Map Number 06081C0308E, October 16, 2012.

Menlo Park Municipal Code. Chapter 7.42 Storm Water Management Program. Available at: http://www.codepublishing.com/CA/MenloPark/, accessed February 26, 2016.

NOAA. 2013. Sea Level Rise and Coastal Flooding Impact Viewer. Available at: https://coast.noaa.gov/slr/, accessed March 1st, 2016.

Oakland Museum of California, 2005. Creek & Watershed Map of Palo Alto & Vicinity. By Janet Sowers, William Lettis and Associates. Available at: https://www.museumca.org/creeks/MapPA.html, accessed February 26, 2016.

San Francisco Bay Conservation and Development Commission (BCDC), 2011. Living with a Rising Bay: Vulnerability and Adaptation in San Francisco Bay and on its Shoreline. Approved on October 6.

San Francisco Bay Regional Water Quality Control Board, 2011. San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan). Originally published January 18, 2007. Last updated in 2015.

San Mateo County, 2013. San Mateo Countywide Water Pollution Prevention Program. C.3 Stormwater Technical Guidance. For use by developers, builders and project applicants to design and build low impact development projects. Version 3.2. January 4.

San Mateo County, 2005. Dam Failure Inundation Zones- San Mateo County. Available at: http://planning.smcgov.org/documents/san-mateo-county-hazards-dam-failure-inundation-areas, accessed May 12th, 2016.

San Mateo County, 1986. General Plan, Overview: Background and Issues (Chapters 1-16). November. Available online at: https://planning.smcgov.org/general-plan, accessed February 26, 2016.

San Mateo Local Agency Formation Commission (LafCo), 2015. Atherton Channel Drainage District. Available online at: http://lafco.smcgov.org/atherton-channel-drainage-district, accessed February 26, 2016.

State Water Resources Control Board (SWRCB), 2010. 2010 Integrated Report (Clean Water Act Section 303(d) List / 305(b) Report) — Statewide. Available at: http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml, accessed February 26, 2016.

CHAPTER 10 NOISE AND VIBRATION

10.1 BACKGROUND INFORMATION ON ACOUSTICS AND VIBRATION

This section summarizes important background information regarding noise and vibration and provides context for evaluating the proposed project's noise effects.

10.1.1 Noise Definition; Sound Measurement, Characterization, and Propagation

Noise is defined as unwanted sound. Airborne sound is the rapid fluctuation of air pressure above and below atmospheric pressure. The frequency (pitch), amplitude (intensity or loudness), 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.

Sound levels are usually measured and expressed in 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. Sound levels in decibels are calculated on a logarithmic basis. 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 their 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.

Humans generally can hear sounds with frequencies between 20 and 20,000 Hz; however, most of the sounds 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. 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 our low and very high frequencies, giving greater weight to the frequencies of sound to which the human ear is typically most sensitive. See Table 10-1 for a list of the typical human response associated with certain A-weighted noise levels, as well as common noise sources capable of generating such noise levels.

Table 10-1 Typical Outdoor and Indoor Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	-110-	Rock Band
Jet flyover at 1,000 feet		
	-100-	
Gas lawn mower at 3 feet		
	-90-	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	-80-	Garbage disposal at 3 feet
Noise urban area, daytime		
Gas lawnmower, 100 feet	-70-	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	-60-	
		Large business office
Quiet urban daytime	-50	Dishwasher next room
Quite urban nighttime	-40-	Theater, large conference room (background)
Quiet suburban nighttime		
	-30-	Library
Quite rural nighttime		Bedroom at night
	-20-	
		Broadcast/recording studio
	-10-	
Lowest threshold of human hearing	-0-	Lowest threshold of human hearing

Source: Caltrans, 2009

Sound levels vary over time. To describe the time-varying nature of environmental noise, several sound descriptors are used. The L1, L10, L50, and L90 descriptors are used to describe the sound levels exceeded 1%, 10%, 50%, and 90% of the time the measurement was performed. 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.

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. Noise exposure over the course of an entire day is described by the day/night average sound level, DNL (or Ldn), and the community noise equivalent level, or CNEL, descriptors. Both descriptors represent the 24-hour noise impact on a community. For Ldn, the 24-hour day is divided into a 15-hour daytime period (7 AM to 10 PM) and a 9-hour nighttime period (10 PM to 7 AM) and 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 would contribute as much to the overall day-night average as a 55 dBA daytime sound level. The CNEL descriptor is similar to Ldn, except that it includes an additional 5 dBA penalty for noise events that occur during the evening time period (7 PM to 10 PM). The artificial penalties imposed during Ldn and CNEL calculations are intended to account for a receptor's increased sensitivity to noise levels during quieter nighttime periods.

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.

10.1.2 Noise Effects

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.

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.

10.1.3 Vibration

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 may be 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. Vibration amplitudes are usually expressed in 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. As with airborne sound, the groundborne velocity can also be expressed in decibel notation as velocity decibels (FTA 2006).

10.2 ENVIRONMENTAL SETTING

The proposed Menlo Park Small High School would be located at 150 Jefferson Drive in the City of Menlo Park's Bayfront Area. As described in section 2.1.1 and shown in Figure 2-2, the proposed school location is surrounded by existing commercial and warehouse land uses. The City of Menlo Park's General Plan Noise Element identifies that major roadways, rail activity, aircraft, and stationary sources of noise are the major contributors to the City's ambient noise environment (City of Menlo Park 2013).

10.2.1 Existing Ambient Noise Levels

Existing ambient noise levels in the project area and vicinity were monitored in September 2015 (see Appendix H). The survey included two 24-hour monitoring locations. Noise levels were measured with two Larson Davis Model 720 Type 2 sound level meters. Noise monitoring was conducted in 10- to 60-minute intervals. Conditions during the monitoring were clear and sunny. Temperatures ranged from mid to high 40s at night to high to low 70s during the day, with to light to calm winds during the monitoring.

Noise monitoring site N1 was located in front (northeast) of the current building between the sidewalk and the existing structure, approximately 20 feet from Jefferson Drive. Noise monitoring site N2 was located in back (southwest) of the existing structure on the western end of the building near the property lines for Exponent Engineering, P.C., Corcept Therapeutics Inc. and Goodwin Procter LLP.

Table 10-2 summarizes the results of the noise monitoring. Noise sources observed included transportation sources, including light traffic on Jefferson Drive and aircraft, and non-transportation sources, such as neighboring construction, generators, and wildlife (e.g., crows). A major contributor to the site's ambient noise levels was the operation of an existing, on-site generator located on the southeast side of the existing building. This generator automatically starts at 6 AM.

Table 10-2 Ambient Noise Levels at the Project Site

Noise Monitoring Location	Ambient Noise Levels (dBA)					
	Hourly Leq	Daytime Leq	Nighttime Leq	Lmax	CNEL	LDN
N1 (20 feet from Jefferson Drive)	47.6 - 60.2	57.4	52.7	69.8	60.4	60.2
N2 (120 feet from Jefferson Drive)	54.7 - 64.9	59.9	56.1	83.3	63.5	63.2

Source: MIG|TRA, 2015 (see Appendix H)

10.2.2 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. There are no noise sensitive receptors within 1,000 feet of the school; however, the school itself is considered a noise-sensitive land use.

10.3 REGULATORY SETTING

10.3.1 Federal Transit Administration

No federal regulations apply to noise or vibration from transmission line operation, but the FTA's 2006 Transit Noise and Vibration Impact Assessment document sets a ground-borne vibration annoyance criterion of 75 VdB for institutional land uses with primarily daytime use. This standard is for "frequent" events occurring more than 70 times per day, such as a rapid transit project. The standards for "occasional" events (occurring between 30 to 70 times per day) and "infrequent" events (occurring less than 30 times per day) are 78 VdB and 83 VdB, respectively. The FTA also sets criteria for construction-related vibration damage, as shown in Table 10-3.

Table 10-3 FTA Groundborne Vibration Threshold Criteria		
Human Response – Institutional Daytime Use	**Maximum PPV (inches/second)**	**VdB**
Frequent Events (More than 70 events per day)	--	75
Occasional Events (Between 30 and 70 events per day)	--	78
Infrequent Events (Less than 30 events per day)	--	83
Vibration Damage Potential Criteria	**Maximum PPV (inches/second)**	**Approximate VdB**
I. Reinforced concrete steel or timber	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90
Source: FTA 2006		

10.3.2 California Code of Regulations

Title 5 of the California Code of Regulations contains standards related to the construction of school facilities. Section 14010 of the code requires school districts to select a school site that is not adjacent to a road or freeway that could cause safety problems or sound levels which adversely affect the education program (5 CCR §14010 e).

10.3.3 City of Menlo Park Municipal Code

Chapter 8.06, Noise, of the Menlo Park Municipal Code is intended to protect the peace, health and safety of Menlo Park citizens from unnecessary and unreasonable noise levels. While the code does specify a maximum noise level for receiving residential land uses of 60 dBA, it does not specify limits for receiving industrial or commercial land uses. Code Section 8.06.040

exempts construction and deliveries from the City's sound level limits (for residential land uses), provided the activity occurs between 8 AM and 6 PM, Monday through Friday; however, no powered equipment is permitted to generate noise in excess of 85 dBA at distance of 50 feet from the source. In addition, section 8.06.050 (d) exempts City and state construction work from the City's noise limits when the work cannot be performed from 7 AM to 6 PM Monday to Friday,

10.3.4 City of Menlo Park General Plan

The City of Menlo Park's General Plan Noise Element contains noise compatibility guidelines which apply to land uses within the City. The General Plan sets a range of 50 dB to 70 dB as "normally acceptable" and from 60 dB to 70 dB as "conditionally acceptable"[22]. The General Plan also contains the following policies that are relevant to noise:

- Require new projects to comply with the noise standards of local, regional, and building code regulations, including but not limited to the City's Municipal Code, Title 24 of the California Code of Regulations, and subdivision and zoning codes (Policy N1.1)
- Protect people in new development from excessive noise by applying the City's Land Use Compatibility Noise Standards for New Development and requiring mitigation for new uses in existing noise (Policy N1.2)
- Protect existing residential neighborhoods and noise sensitive uses from unacceptable noise levels and vibration impacts, discourage the siting of noise-sensitive uses in areas in excess of 65 dBA CNEL without appropriate mitigation, and locate noise sensitive uses away from noise sources unless mitigation measures are included in development plans Policy N1.4)
- Encourage the use of construction methods, state-of-the-art noise abating materials and technology and creative site design including, but not limited to, open space, earthen berms, parking, accessory buildings, and landscaping to buffer new and existing development from noise and to reduce potential conflicts between ambient noise levels and noise-sensitive land uses (Policy N1.6)
- Design non-residential development to minimize noise impacts on nearby uses. Where vibration impacts may occur, reduce impacts on residences and businesses through the use of setbacks and/or structural design features that reduce vibration to levels at or below the guidelines of the Federal Transit Administration near rail lines and industrial uses (Policy N1.7)

10.4 PLAN IMPACTS AND MITIGATION MEASURES

Consistent with CEQA and the CEQA Guidelines Appendix G, this EIR focuses on the potentially significant direct and indirect impacts that could result from implementation of the Menlo Park Small High School Project, as described in Chapter 2. The SUHSD has determined that, based on the characteristics of the project and the environmental conditions described in section 10.2, the proposed Menlo Park Small High School Project:

[22] Regarding conditionally acceptable compatibility criteria, the General Plan's Table of Land Use Compatibility Standards for New Development (within Policy N1.2) states "Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise reduction features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice."

- Does not have the potential to expose people to excessive, airport-related noise levels because there are no public or private airstrips or airports within two miles of the proposed school site and the proposed school would not be located within any noise-impacted or other planning area associated with an airport land use compatibility plan. The closest airport to the proposed Menlo Park Small High School, Palo Alto Airport, is approximately 3.5 miles southeast of the campus.
- Does not have the potential to expose people or generate noise levels in excess of applicable standards because: 1) ambient noise monitoring at the proposed project site (approximately 60 to 63 LDN/CNEL, see Table 10-2) indicate ambient noise levels at the proposed project site are within the "normally acceptable" (50 to 70 LDN/CNEL) and "conditionally acceptable" (60 to 70 LDN/CNEL) range for school land uses; 2) the proposed project includes a heating, ventilation, and air conditioning system that would enable windows to be shut if necessary; 3) the proposed project's conventional construction would attenuate exterior noise levels by at least 20 dbs and render interior noise levels less than 45 dbA LDN/CNEL; and 4) the City of Menlo Park does not maintain noise-compatibility or other standards for adjacent non-residential land uses.

For these reasons, these issues are not discussed further in this EIR. The potentially significant noise impacts that could result from implementation of the project are described in sections 10.4.2 and 10.4.3 below.

10.4.1 Thresholds of Significance

Based on CEQA Guidelines Appendix G, the proposed project would have a significant noise and vibration impact if it would:

- Create a significant impact to the public or the environment through the substantial temporary or periodic increase of ambient noise levels in the project vicinity above levels existing without the project;
- Create a significant impact to the public or the environment through the exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels; or
- Create a significant impact to the public or the environment through the substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

The District does not have its own general standards of significance for noise; however, since the proposed Menlo Park Small High School is located in the City of Menlo Park, the District considered the City of Menlo Park General Plan and municipal code as guidelines for project-specific noise standards of significance (see section 10.3). In reviewing these standards, the District considered: 1) the nature of the standard for the project (e.g., a 24-hour Ldn standard is not appropriate for a daytime construction event); 2) the general applicability of the standard (i.e., is the standard intended to apply to transportation noise sources or non-transportation noise sources such as a high school); and 3) the extent to which ambient noise levels exceed established standards.

For temporary construction noise, the District considers demolition, site preparation, and building construction activities resulting in a 10 dB increase in hourly noise levels above ambient conditions at noise sensitive land uses to be a substantial increase in noise levels, provided this increase occurs for two or more hours a day, five days a week, for more than 12 months. For

long-term noise, the District considers a substantial, permanent increase in noise to be a five dB increase above ambient conditions.

In evaluating the project's potential vibration levels, the District considers vibration levels that exceed 0.12 PPV to be excessive ground borne vibration. According to the FTA's Transit Noise and Vibration Impact Assessment, this level of ground borne vibration poses virtually no risk of architectural damage to normal buildings (FTA 2006).

10.4.2 Potential Impacts from Construction Noise and Vibration

Implementation of the Menlo Park Small High School project would involve the use of construction equipment to demolish buildings, prepare work areas, and build or install new facilities. The use of heavy machinery and equipment would generate noise and vibration on a temporary basis.

Impact NOI-1: Implementation of the Menlo Park Small High School project would generate temporary, construction-related noise and vibration.

Implementation of the Menlo Park Small High School project would require the use of heavy-duty construction equipment that could temporarily increase noise and vibration levels near the project. Potential construction activities would generally involve demolition, site preparation, and building construction. These activities would require the use of typical construction equipment such as backhoes, compactors/rollers, and trucks. The project would also involve the use of drill rigs to install augercast piles. Table 10-4 lists typical construction equipment and the corresponding noise level that would be produced during construction of the Menlo Park Small High School project.

Table 10-4 Estimated Construction Equipment Noise Levels

Equipment	Noise Level (L_{max}) @ 50 feet[A]	Usage Factor[B]	Calculated Noise Levels (L_{eq})[C]			
			25 feet	50 feet	100 feet	200 feet
Air compressor	80	40%	82	76	70	64
Air tamper	80	40%	84	78	72	66
Auger drill rig	85	20%	84	78	72	66
Backhoe	80	40%	82	76	70	64
Boom Truck	84	40%	86	80	74	68
Bulldozers	85	40%	87	81	75	69
Concrete Mixer	85	40%	87	81	75	69
Crane (<12 tons)	85	16%	83	77	71	65
Flatbed truck	84	40%	86	80	74	68
Tractor Trailers	85	40%	87	81	75	69

Sources: Caltrans 2009 and FHWA 2010.

(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 derived by: 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.

As shown in Table 10-4, the Leq and Lmax construction equipment noise levels are predicted to be approximately 81 and 85 dBA, respectively, at 50 feet, which is approximately 20 to 40 db higher than exterior ambient conditions (see Table 10-2); however the actual magnitude of the project's temporary and periodic increase in ambient noise levels would depend on the nature of the construction activity (*i.e.*, demolition, site preparation, foundation installation, or building construction) and the distance between the construction activity and sensitive outdoor areas. Demolition and foundation installation activities are expected to generate the highest noise levels because they involve the heaviest equipment usage, whereas building construction is expected to generate the lowest noise levels because typically heavy equipment is not needed to frame or finish a building, although cranes may be used to tilt-up building materials and components.

Project construction noise is considered less than significant for several reasons. First, the proposed construction activities would not take place near sensitive residential receptors. Second, as described in section 10.3.3, the City of Menlo Park does not maintain receiving land use limits for the businesses adjacent to the proposed Menlo Park Small High School (which are zoned M2 by the City). Third, substantial noise-generating construction activities, such as demolition and foundation installation activities would not last more than 12 months, and interior noise levels at adjacent businesses would not be substantially increased. For these reasons, proposed construction equipment noise levels would be a less than significant impact.

Demolition, site preparation, and building construction activities that could result in ground-borne vibration would occur at least 30 feet from any adjacent structure[23]. Table 10-5 lists the estimated ground-borne vibration levels associated for the type of construction equipment the SUHSD would likely use to build the Menlo Park Small High School project.

Table 10-5 Estimated Ground-Borne Vibration Levels from Construction Equipment

Equipment	Peak Particle Velocity (in/sec) (A)		Velocity Decibels (VdB) (B)	
	25 feet	30 feet	25 feet	30 feet
Large bulldozer	0.089	0.070	87.0	84.6
Small bulldozer	0.03	0.002	58.0	55.6
Loaded truck	0.076	0.060	86.0	83.6
Jackhammer	0.035	0.028	79.0	76.6
Auger Drill Rig	0.089	0.070	87.0	84.6

Sources: Caltrans 2004 and FTA 2006.

(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).

(B) Estimated Lv calculated as: Lv(D)=Lv(25 feet)-30Log(D/25) where Lv(D)= estimated velocity level in decibels at distance, Lv(25 feet)= RMS velocity amplitude at 25 f; and D= distance from equipment to receiver.

As shown in Table 10-5, construction equipment vibration levels from large bulldozers and auger drill rigs (0.070 in/sec PPV and 84.6 VdB) operating within 30 feet of a residence or other structures could exceed FTA vibration annoyance criterion of 75 VdB (for frequent events)

[23] The use of 30-feet is based on the linear distance between the site property line and the closest inhabitable structure.

would therefore likely be perceptible by adjacent businesses when equipment is operating right next to property lines; however, this impact is considered less than significant because any equipment operation near property lines would be infrequent and short in duration (lasting only a few hours or days) and would not involve augering. Most structures are located approximately 65 feet or more from property lines (and even further from work areas) and would not perceive ground-borne vibration from project construction. In addition, potential worst-case vibration levels would not damage buildings or structures and would therefore not be excessive. Construction-related ground-borne vibration is therefore considered a less than significant impact.

10.4.3 Potential Impacts from Menlo Park Small High School Noise

Once constructed, the proposed project would involve operation of a small high school on SUHSD-owned lands. Accordingly, the proposed project has the potential to increase noise levels above ambient conditions.

Impact NOI-2: Implementation of the Menlo Park Small High School project could increase ambient noise levels in the vicinity of the project.

The proposed project has the potential to permanently increase noise levels in the vicinity of the project; however, this effect would be less than significant for several reasons. First, the proposed school would replace the noise generated by the existing warehouse operations. Second, the proposed school does not include fields or other athletic areas on-site where whistles, horns, or other sport-related noise could be generated; once developed, school sports teams could use existing nearby parks, but this increase in use associated with school sports would not substantially increase noise levels in the vicinity of community parks. Third, the SUHSD has designed the proposed drop-off area such that is shielded from adjacent land uses to some degree by the proposed buildings. In addition, the land uses adjacent to the proposed school consist of non-residential land use that lack sensitive outdoor areas (outside lunch areas not included) that could be affected by student drop-off and pick-up noise from the proposed project (e.g., car doors closing, radios, human speech).

Typically, the loudest and most intrusive noise source associated with school operation is the uncontrolled operation of an exterior public address system and school bells; sound from this equipment can reflect off of building surfaces and be audible at property lines and exterior areas adjacent to a school. This impact is considered less than significant because the Menlo Park Small High School is surrounded by non-residential land uses that are already impacted by roadway noise from U.S. 1010, Marsh Road, and Bayfront Expressway, and the short-term use of an exterior bell or PA system would not substantially increase interior noise levels at adjacent businesses.

Potential noise from off-site vehicle trips added to the roadway system as a result of the project would not be substantial. As described in the transportation impact analysis prepared for the project, the new school could result in a total of 322 AM (7 to 9 AM) and 174 PM (4 to 6 PM) peak hour vehicle trips (Hexagon 2016). Caltrans considers a doubling of total traffic volume to result in a three dBA increase in traffic-related noise levels (Caltrans 2009). The proposed project would result in substantially less than a doubling of daily traffic volumes on roadways used to access the site (see Table 4-14), including Jefferson Drive, and would therefore not result in a substantial, permanent increase in noise levels along project roadways.

10.5 REFERENCES

California Department of Transportation (Caltrans). 2004. "Transportation- and Construction-Induced Vibration Guidance Manual." <http://www.dot.ca.gov/hq/env/noise/pub/vibrationmanFINAL.pdf >

_____2009. Technical Noise Supplement. Prepared by ICF Jones and Stokes for Caltrans Division of Environmental Analysis. Sacramento, CA. November 2009.

City of Menlo Park. 1999. "Menlo Park Municipal Code". Updated January 2015. <http://www.codepublishing.com/CA/MenloPark/html/MenloPark08/MenloPark0806.html >

_____2013. "City of Menlo Park General Plan. Open Space/ Conservation, Noise and Safety Elements." Adopted May 2013. <http://www.menlopark.org/DocumentCenter/View/234>

U.S. Federal Highway Administration (FHWA) 2010. "Construction Noise Handbook, Chapter 9 Construction Equipment Noise Levels and Ranges." *U.S. Department of Transportation FHWA*. July 5, 2011. Web. April 28, 2015. http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm

U.S. Federal Transit Administration (FTA) 2006. *Transit Noise and Vibration Assessment*. FTA-VA-90-1003-06. Washington, DC. May 2006.

This page intentionally left blank.

CHAPTER 11 PUBLIC SERVICES AND UTILITIES

11.1 ENVIRONMENTAL SETTING

The proposed Menlo Park Small High School project would be located in the City of Menlo Park's Bayfront Area. The City's ConnectMenlo Draft EIR generally notes that redevelopment of the City's Bayfront Area, would not result in any significant impacts to public services or utility providers and/or infrastructure, and that many utility infrastructure improvements already planned for by agencies in other documents (e.g. water supply assessment and sewer master plans) (City of Menlo Park 2016). The proposed school site is occupied by a warehouse totaling approximately 44,000 square feet. This facility uses and consumes currently uses and consumes utilities; however, the consumption rates for this existing land use are not available.

11.1.1 Existing Public Service Providers

The proposed Menlo Park Small High School is intended to accommodate the growing community's need for public educational facilities in the area. Nearby schools in the area include: Cesar Chavez Elementary School (approximately 1.7 miles to the southeast), Bright Angle Montessori Academy (approximately 1.15 miles to the southeast), Taft Community School (approximately 1.1 miles to the west), Encinal Elementary School (approximately 1.4 miles to the southwest), Laurel Elementary School (approximately 1.1 miles to the south), Menlo-Atherton High School (approximately 1.5 miles to the south), Peninsula School (approximately 1.5 miles to the south), and Everest Public High School (approximately 1.75 miles to the southwest).

The Menlo Park Fire Protection District provides fire protection service to the City. The closest fire station to the proposed school site, is Station 77 located at 1467 Chilco Street, approximately 0.7 miles east of the project site (about 1 mile away via surface roads); Station 77 is manned by three firefighting personnel who operate a Pierce Saber Engine. A second station, Station 1 is located at 300 Middlefield Road, approximately 1.8 miles south of the project site (about 3.6 miles away via surface roads).

The City of Menlo Park Police Department provides police protection services. Department headquarters is located at 701 Laurel Street, located approximately 2 miles south of the project site (about 3.6 miles away via surface roads). The Police Department also operates a substation and neighborhood service center north of Highway 101 in the Belle Haven neighborhood.

11.1.2 Existing Utilities

150 Jefferson Drive contains existing electricity, natural gas, water, sewer, and telecommunication utility lines. The City of Menlo Park does not yet operate recycled water lines. Water service is provided by the Menlo Park Municipal Water District. Wastewater service is provided by the West Bay Sanitation District, and treatment is provided at the Silicon Valley Clean Water Regional Waste Water Treatment Plant in Redwood Shores. Recology provides the City with municipal solid waste disposal at several landfills in the vicinity of the greater San Francisco Bay Area.

In general, existing utility lines are either located in the Jefferson Drive right-of-way or in one an approximately 350-foot-long by 10-foot-wide sanitary sewer easement located along the southern property line. Overhead electrical lines run along the south side of Jefferson Drive, in the front of the proposed school site. An existing transformer located on the east side of the site

steps down power for site use. Natural gas and water mains that run under Jefferson Drive serve the site; lateral pipelines transfer natural gas and water from these mains onto the property. Existing, 8-inch-wide sanitary sewer mains run along the northern and southern sides of the property. The West Bay Sanitation District has indicated these lines may require upgrading to support the project (West Bay Sanitation District 2016).

The project's potable water consumption would be approximately equivalent to wastewater generation. Potable water use / wastewater generation at other SUHSD high schools ranges from a low 8.5 gallons per student per day to at small charter high school to a high of 37 gallons per student per day at a large comprehensive high school with landscaping areas and turf fields[24]; the U.S. Environmental Protection Agency estimates the range in wastewater flows from schools with a cafeteria, gym, and showers to range from 15 – 30 gallons per student per day, with typical flows of 25 gallons per student per day (U.S. EPA 2002). The estimated project water consumption / wastewater generation based on these rates is shown in Table 11-1.

Table 11-1 Estimated Project Potable Water Consumption / Wastewater Generation

Water Consumption	SUHSD Low(A)	SUHSD High(B)	US EPA Average
Range in Gallons / Student / Day(C)	8.5	37	25
Small High School Students	400	400	400
Total Daily Consumption (Gallons)	3,400	14,800	10,000
Total Annual Consumption (Gallons)(D)	612,000	2,664,000	1,800,000
Total Annual Consumption (CCF)(E)	818	3,561	2,406

Source: SUHSD 2015, USEPA 2002

(A) Consumption based on actual water use at the SUHSD's East Palo Alto Charter High School in 2015 (enrollment was 391 students).

(B) Consumption based on actual water use at the SUHSD's Menlo-Atherton High School from 2011 (mid range) and 2012 (high range).

(C) Gallons per student per day and gallons estimate assumes 180 school days per year.

(D) Total annual consumption assumes 180 day school year.

(E) CCF is hundred cubic feet. 1 CCF = 748 gallons. Total annual consumption assumes 180 day school year.

11.2 REGULATORY SETTING

11.2.1 West Bay Sanitation District

The West Bay Sanitary District provides sewer utilities and municipal waste water treatment for the project site and portions of Atherton, Woodside, East Palo Alto, Redwood City and San Mateo County. The West Bay Sanitary District, along with the Cities of Belmont, San Carlos, and Redwood City comprise the Joint Powers Agency of SVCW, and own and operate the

[24] Range in water consumption is based on actual water use at the District East Palo Alto Charter High School for the year 2015 and actual water use at the District's Menlo-Atherton High School from the 2010 to 2014 time period and assumes 180 days per year, which overestimates daily water consumption and sewer flows.

Silicon Valley Clean Water (SVCW) waste water treatment facility (formerly operated as South Bay Sewer Authority or SBSA) in Redwood Shores. SVCW is subject to waste discharge requirements set forth in San Francisco Bay Regional Water Quality Control Board Order Number R2-2012-0062.

11.3 PROJECT IMPACTS AND MITIGATION MEASURES

Consistent with CEQA and the CEQA Guidelines Appendix G, this EIR focuses on the potentially significant direct and indirect impacts that could result from implementation of the Menlo Park Small High School Project, as described in Chapter 2. The SUHSD has determined that, based on the characteristics of the project and the environmental conditions described in section 11.1, the proposed Menlo Park Small High School Project:

- Does not have the potential to result in adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times, or other performance objectives for fire or police protection services, schools, libraries, or parks. The proposed project is considered in the City's General Plan Update (ConnectMenlo), and the SUHSD has coordinated with the City and its appropriate departments as needed to ensure sufficient emergency access and response times are provided. Consultation with the Menlo Park Fire Protection District and the City of Menlo Park Police Department has confirmed the proposed project would not result in adverse physical impacts associated with new or altered facilities (Bertini 2016, Johnston 2016). The project would not affect schools or libraries, and would result in less than significant effects on existing recreation facilities (see section 3.3.8)
- Does not have the potential to exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board because the proposed small high school would not generate waste water subject to specific waste discharge requirements or permits.
- Does not have the potential to result in the construction of new or expanded storm water facilities that could cause significant environmental effects. The proposed project would reduce impervious surfaces at 150 Jefferson Drive, thereby increasing infiltration and reducing flows to the storm water system.
- Does not have the potential to be served by an inadequate water supply because the project includes green design features that reduce water consumption (e.g., drought-resistant landscaping) and a recent water supply evaluation conducted on behalf of the City of Menlo Park's General Plan Update concluded the Menlo Park Municipal Water District has sufficient water supplies available even in multiple dry years (which would require implementation of the Water District's Water Shortage Contingency Plan) through the year 2040.
- Does not have the potential to be served by a landfill with insufficient capacity because the General Manager for Recology for has confirmed that Recology is continually working on reducing the waste stream and there will be sufficient permitted capacity at a landfill to meet future solid waste service needs even with the increased enrollment (Pinochi 2015).
- Does not have the potential to conflict with federal, state, and local statutes and regulations related to solid waste because the SUHSD currently complies with federal, state and local statutes and regulations related to solid waste disposal and the proposed

project would not result in changes to the types of materials within the solid waste stream produced by District facilities.

For these reasons, these resources are not discussed further in this EIR. The potentially significant public service and utility impacts that could result from implementation of the proposed project are described in section 11.3.2 below.

11.3.1 Thresholds of Significance

Based on CEQA Guidelines Appendix G, the proposed project would have a significant impact related to public services and utilities if it would:

- Require or result in the construction of new wastewater facilities which could cause significant environmental effects; or
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in to existing commitments.

11.3.2 Potential Impacts on Public Services and Utility Providers

The construction and operation of the proposed project could interfere with existing utility systems and, once operational, require adequate utility services for normal school operation.

Impact PSU-1: The Menlo Park Small High School Project would increase wastewater generation at the site and could result in new or expanded wastewater facilities.

As shown in Table 11-1, potable water consumption and wastewater generation for the proposed Menlo Park Small High School project is estimated to range from 8.5 to 37 gallons per student per day (this estimate also includes wastewater generated by staff). Thus, at worst-case (i.e., 37 gallons of wastewater per day and 400 students), the proposed project would add approximately 14,800 gallons per day, or 0.014 million gallons per day (MGD) of wastewater flows to the West Bay Sanitation District's sewer mains and, ultimately, the SVCW treatment plan in Redwood Shores. From July 2008 through June 2011, the average monthly flow from the SVCW was 15.9 MGD, and the maximum daily flow was 48.8 MGD. Both these rates are well within the 29 MGD average dry weather design flow and 71 MGD peak wet weather design flows at the SVCW (SFBRWQCB 2012). The West Bay Sanitary District's share of dry weather flow capacity at the SVCW treatment plant in Redwood Shores is 7.975 MGD. The West Bay Sanitary District's current average dry weather flow is approximately 4.58 MGD. The proposed project is not expected to exceed the dry weather flow capacity allotted to the West Bay Sanitary District; however, the West Bay Sanitary District has indicated that the gravity sewer lines serving the Menlo Park Small High School Project may require upsizing up to the intersection Jefferson Drive and Chrysler Drive, a distance of approximately 475 feet (West Bay Sanitation District 2016). To reduce the potential for implementation of the project to result in the inefficient use of water resources, unnecessary generate of wastewater, and construction of new off-campus wastewater pipelines or other facilities, the District shall implement Mitigation Measures PSU-1A and PSU-1B below.

Mitigation Measure PSU-1A: The District shall incorporate water saving devices on all new water using fixtures.

The District shall incorporate water saving features or devices in all new water using fixtures installed at the Menlo Park Small High School. This can include, but is not

limited to the use of high efficiency faucet aerators, shower heads, toilets and urinals; automatic faucets; or air cooled or water saving ice machines.

Mitigation Measure PSU-1B: Minimize and Avoid Impacts to the West Bay Sanitation District Sewer System.

The District shall coordinate with the West Bay Sanitary District to determine when and what, if any, sanitary sewer system improvements can be implemented to minimize flows to the sewer system to the maximum extent feasible and /or avoid upgrades to existing sanitary sewer facilities at the Menlo Park Small High School site and/or on Jefferson Drive. Options to reduce sanitary sewer flows from the school may include:

- Implementing water-saving features as required by Mitigation Measure PSU-1A
- Constructing underground holding tanks to hold sewer flows during the day and pump it off-site at night when flow rates are lower
- Rerouting or diverting portions of sewer flows to other sewer facilities not currently impacted by inadequate capacity
- Other measures determined by the West Bay Sanitary District to minimize and avoid upgrades to sanitary sewer facilities serving the Menlo Park Small High School project

Mitigation Measures PSU-1A and PSU-1B require the District to reduce wastewater flows to minimize and avoid upgrades to existing sanitary sewer facilities serving the proposed school site. Thus, with these measures, Impact PSU-1 would be rendered a less than significant impact.

11.4 REFERENCES

Bertini 2016. Phone communication between Dave Bertini, Menlo Park Police Department Commander, and Phillip Gleason, Analyst, MIG. April 8, 2016.

Johnston 2016. Phone communication between John Johnstin, Fire Marshal, Menlo Park Fire Protection District, and Phillip Gleason, Analyst, MIG. all: March 31, 2016.

Pinoche 2015. Personal communication, General Manager, San Mateo County Services, Recology, to Victoria Harris, MIG │ TRA Environmental Sciences. March 11, 2015.

San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) 2012.Order No. R2-2012-0062, NDPES Permit No. CA0038369. Effective October 1, 2012

United States Environmental Protection Agency (U.S. EPA) 2002. Onsite Wastewater Treatment Systems Manual. EPA Report No. EPA/625/R-00/008. n.p. February 2002

This page intentionally left blank.

CHAPTER 12 CUMULATIVE IMPACTS

CEQA requires that an EIR evaluate a project's cumulative impacts. Cumulative impacts are the project's impacts combined with the impacts of other related past, present, and reasonably foreseeable future projects. As set forth in the CEQA Guidelines, the discussion of cumulative impacts must reflect the severity of the impacts, as well as the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone. As stated in CEQA, "a project may have a significant effect on the environment if the possible effects of a project are individually limited but cumulatively considerable" (PRC §21083(b)).

12.1 METHODOLOGY

Consistent with CEQA Guidelines section 15130, this EIR evaluates potential cumulative impacts using a list of past, present, and probable future projects producing related or cumulative impacts. This list was compiled using publicly available data from the Sequoia Union High School District, the Town of Atherton, and the City of Menlo Park, and is shown in Table 12-1. Sources of past, present, and probable future projects included personal communication with SUHSD staff and the websites for the planning departments of Town of Atherton and the City of Menlo Park.

12.2 ANALYSIS OF CUMULATIVE IMPACTS

The cumulative impact analysis considers the combined impacts of the proposed Menlo Park Small High School Project and the past, present, and probable future projects listed in Table 12-1. In accordance with CEQA Guidelines Section 15130(b), the discussion of cumulative impacts describes the likelihood and severity of impacts associated with the projects identified in Table 12-1 and in accordance with CEQA Guidelines 15130(a), determines whether the Project's incremental effect is cumulatively considerable when assessed in conjunction with these other projects. In addition, as stated in CEQA Guidelines, it should be noted that:

"The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable (14 CCR §15064(h)(4))."

As described in Chapter 4 – Chapter 11 of this EIR, implementation of the proposed Menlo Park Small High School Project would have the following significant and unavoidable impact:

- ***Impact TRA-1: Implementation of the Menlo Park Small High School Project would add AM peak hour, school PM peak hour, and daily trips to the circulation and transportation system in the vicinity of 150 Jefferson Drive.***

Implementation of the Menlo Park Small High School Project would result in no impacts, less than significant impact, and/or potentially significant impacts that would be mitigated to less than significant levels on all other resource areas considered in this EIR. Impacts that are individually or incrementally minor may become significant when combined with impacts associated with past, present, and other anticipated future projects. The potential cumulative impacts in each resource area of concern are described below.

Table 12-1 List of Past, Present and Probable Future Projects in the Project Area			
Project Name	**Project Location**	**Distance and Direction from Proposed Project**	**Brief Project Description**
Sequoia Union High School District			
Menlo-Atherton High School Facilities Master Plan	555 Middlefield Road Atherton	1.4 miles south	A long-range plan for upgrades, maintenance and addition of new facilities at Menlo-Atherton High School to meet enrollment needs over the next 5 to 10 years.
Woodside High School Facilities Master Plan	199 Churchill Avenue Woodside	4 miles southwest	A long-range plan for upgrades, maintenance and addition of new facilities at Woodside High School to meet enrollment needs over the next 5 to 10 years.
Sequoia High School Facilities Master Plan	1201 Brewster Avenue Redwood City	3.5 miles west	A long-range plan for upgrades, maintenance and addition of new facilities at Sequoia High School to meet enrollment needs over the next 5 to 10 years.
Carlmont High School Facilities Master Plan	1400 Alameda de las Pulgas Belmont	6.5 miles west	A long-range plan for upgrades, maintenance and addition of new facilities at Carlmont High School to meet enrollment needs over the next 5 to 10 years.
Town of Atherton			
Housing Element Update	Atherton	N/A	Update of the Housing Element of the Town's General Plan. Atherton has an allocation of 93 housing units over the 2014-22 planning period, according to the California Department of Housing and Community Development.
Atherton Library Project	Holbrook-Palmer Park,	1.9 miles south	The proposed project would result in demolition of the existing Main House and construction of a new two-story, up to 13,500 square-foot library and associated improvements. Voters rejected Holbrook-Palmer Park as the site of the new library in 2012.
Menlo-Atherton Little League	Holbrook-Palmer Park	1.7 miles south	Includes improvements to the existing Little League baseball diamond in Holbrook-Palmer Park.
Cartan Field Improvement Project	1000 El Camino Real,	2.1 miles south	Menlo College and Menlo School jointly are proposing to completely reconstruct Cartan Field.
Menlo School Enrollment Increase Project	50 Valparaiso Ave	2.2 miles south	Enrollment increase from 750 to 795 students and associated transportation demand management program.

Table 12-1 List of Past, Present and Probable Future Projects in the Project Area			
Project Name	**Project Location**	**Distance and Direction from Proposed Project**	**Brief Project Description**
Civic Center Project	Area bounded by Fair Oaks Ln., Ashfield Rd., Maple St. & train tracks	1.8 miles southwest	The proposed Civic Center would include council chambers, library; and facilities for town administration, the police department, the building department and public works.
Sacred Heart Schools Projects	150 Valparaiso Ave.,	2.6 miles southwest	Master Plan including demolition, construction, renovation, and site improvements on the site to accommodate an additional 114 students on the campus, from the current 1,082 students to a maximum enrollment of approximately 1,196 students; demolition of the existing basketball courts and construction of a Practice Gym building; and transportation demand management program.
Marsh Road Retaining Wall Repair	Middlefield Road to Fair Oaks Avenue	2 miles southwest	Construction to replace the Atherton Channel walls and floor from Middlefield Road northerly to Fair Oaks Avenue. The retaining wall supporting Marsh Road, which also forms one of the walls of Atherton Channel, is in need of repair. A metal railing to prevent vehicles from driving into the Channel from Marsh Road will be installed.
City of Menlo Park			
General Plan Land Use and Circulation Update (ConnectMenlo)	Menlo Park	N/A	General Plan Update covering the Bayfront Area
555 Glenwood Avenue Project	555 Glenwood Ave	1.9 miles south	Modification of an existing senior citizen's retirement living center into a limited-service, business-oriented hotel.
1300 El Camino Real Project	1300 El Camino Real	2 miles south	Construction of a grocery store / market with associated alcohol sales (51,365 square feet) and non-medical office (58,700 square feet).
1460 El Camino Real Project	1452 & 1460 El Camino Real and 1457 & 1473 San Antonio Street	2 miles south	Merge 4 existing parcels, demolish the existing structures on the combined site, and construct a new approximately 26,800-square-foot, two-story office building with submerged parking and 16 two-story townhouse units with partially submerged parking on a property located at 1452 and 1460 El Camino Real and 1457 and 1473 San Antonio Street.
389 El Camino Real Project	389 El Camino Real	2.3 miles south	Demolition of an existing single-family house and residential triplex, and construction of 26 residential units on the site.
1706 El Camino	1706 El Camino Real	2 miles southwest	Demolition of an existing one-story, 6,875 square-foot commercial

Table 12-1 List of Past, Present and Probable Future Projects in the Project Area			
Project Name	**Project Location**	**Distance and Direction from Proposed Project**	**Brief Project Description**
Real Medical Office			building and construction of a new two-story, 10,148 square-foot office building for medical / dental office use and the related site improvements.
Commonwealth Corporate Center Project	151 Commonwealth Dr. & 164 Jefferson Drive	0.1 miles east	Demolition of existing on-site buildings and construction of 2 four-story office/research and development buildings totaling approximately 259,920 square feet.
Menlo Gateway Project	100-190 Independence Dr. & 101-155 Constitution Dr., Menlo Park	0.1 miles northwest	Construction of cafe / restaurant (4,245 square feet); health club, serving hotel guests and the public (68,519 square feet); hotel (171,563 square feet; 230 rooms); neighborhood-serving retail and community facilities (10,420 square feet); three office and R&D buildings (694,669 square feet); and three parking structures.
Facebook Campus Project	1 Hacker Way & 1 Facebook Way,	0.9 miles east	Consists of the 56.9-acre East Campus at 1 Hacker Way currently developed with nine buildings, and the 22-acre West Campus at 1 Facebook Way where two existing buildings will be demolished and an approximately 433,555 square foot building will be constructed.
Core/VA	605 Willow Rd	1.6 miles southeast	Construction of 60 housing units from 449-787 square feet on 1.9 acres site.
MidPen Housing	1221 Willow Rd.	1.2 miles southeast	Construction of 90 housing units from 513-705 square feet on 2.26-acre site.
Greenhart	777 Hamilton Ave.	1.1 miles east	Construction of 195 housing units from 703-1,569 square feet on 6.5-acre site.
St. Anton	3639 Haven Ave.	1.6 miles west	Construction of 394 housing units from 563-1,549 square feet on 9.69-acre site.
Graystar	3645 Haven Avenue	0.5 miles west	Construction of 146 housing units from 697-1,256 square feet on 4.89-acre site.
SRI Campus Modernization Project	Ravenswood Ave., between Laurel St. & Middlefield Rd.	1.5 miles south	SRI International is proposing to modernize its 63.2-acre campus by replacing the majority of the existing buildings over a 25 year development period. The site contains approximately 1,380,332 square feet of gross floor area which would remain the same after the reconstruction.
1020 Alma Street	1010-1026 Alma Street	2 miles	Lane Partners is proposing to demolish two existing commercial

Table 12-1 List of Past, Present and Probable Future Projects in the Project Area			
Project Name	**Project Location**	**Distance and Direction from Proposed Project**	**Brief Project Description**
		south	buildings and construct a new three-story office building with two subterranean parking levels on a 0.7-acre site.
Derry Mixed Use Project	Derry Lane,	2 miles south	O'Brien at Derry Lane, LLC, proposed to construct a mixed-use development consisting of 108 for-sale housing units and 24,925 square feet of commercial space on a 3.45-acre site.
1300 El Camino Real	1300 El Camino Real	2 miles south	Greenheart Land Company is proposing to redevelop a 6.4-acre site on El Camino Real and Oak Grove Avenue with up to 217,900 square feet of commercial uses and up to 202 dwelling units.
500 El Camino Real Project	300-550 El Camino Real	2.2 miles south	The existing buildings (current and former auto dealerships) and site features would be replaced with a new mixed-use development consisting of offices, housing, and retail totaling 413,200-459,013 square feet on an 8.43-acre site.
133 Encinal Avenue Project	133 Encinal Avenue	1.8 miles southwest	Hunter Properties is proposing to demolish the existing garden nursery buildings and construct 26 new residential units and associated site improvements on a 1.74-acre site.
Facebook Campus Expansion Project	300-309 Constitution Drive	0.3 miles east	Proposed redevelopment of 300-309 Constitution Drive with two new office buildings and publicly-accessible open space.

12.2.1 Aesthetics

The proposed Menlo Park Small High School Project is located in the City's Bayfront / M-2 Planning Area, which is and will continue to undergo a transformation from existing warehouse / industrial park land uses to newer corporate campuses and mixed biotechnology and other land uses as part of the City's General Plan update (ConnectMenlo). As discussed in section 3.3.1, there are no publically accessible long range sweeping views of valleys, hills, mountains, baylands, ocean or the urban skyline readily viewable from the proposed school site or most of the local roads used to access the proposed school site such as Jefferson Drive and Independence Drive, and the proposed school design would be generally consistent with the approved developments in the City's Bayfront Area. In addition, given the lack of topography in the City of Menlo Park, the Bayfront Area and the proposed school would not be visible from most parts of the City and thus would not degrade any scenic vista. The combined aesthetic impacts of the proposed project and the other past, present, and reasonably foreseeable projects would be less than significant. Similarly, the proposed project would not add cumulatively considerable amount of light or glare to the Bayfront Area in light of the fact that taller, more brightly lit buildings would be present, such as the Menlo Gateway hotel.

12.2.2 Agriculture and Forestry Resources

Implementation of the Menlo Park Small High School Project would have no impact to agriculture and forestry resources (see 3.3.2) and, therefore, would not contribute to cumulative impacts on these resources.

12.2.3 Air Quality

Construction and operation of the proposed Menlo Park Small High School Project would generate air quality emissions that would combine with emissions from other past, present, and reasonably foreseeable projects throughout the San Francisco Bay Area Air Basin. The City's General Plan update (ConnectMenlo) Draft EIR identifies that the proposed general plan updates would contribute to a cumulative considerable net increase in emissions. As discussed in Chapter 5, implementation of the proposed project would not result in construction or operational emissions that exceed Bay Area Air Quality Management District (BAAQMD) thresholds of significance. In developing its CEQA significance thresholds, the BAAQMD considered the emission levels at which a project's individual emissions would be cumulatively considerable. The BAAQMD considers projects that result in emissions that exceed its CEQA significance thresholds to result in individual impacts that are cumulatively considerable and significant. The proposed project would not individually exceed any BAAQMD CEQA significance thresholds and therefore would not result in a cumulative considerable net increase in emissions.

12.2.4 Biological Resources

As discussed in Chapter 6 , the Menlo Park Small High School Project is a developed site used for industrial purposes and is surrounded by warehouse and office uses; there are no sensitive habitats on or near the project site. The project does not have the potential to have a substantial adverse effect on special-status species. Potential impacts to nesting birds and roosting bats from tree removal would be reduced to less than significant levels with implementation of Mitigation Measures BIO-1A through 1D. All other projects listed in Table 12-1 would occur in a developed area, and could have construction- and development-related impacts to nesting birds, roosting bats, and other special-status species and their habitat. Therefore, the potential exists for biological impacts from implementation of the Menlo Park Small High School Project to combine with impacts from the projects listed in Table 12-1, resulting in cumulative impacts to

sensitive biological resources; however, implementation of the Menlo Park Small High School Project would not result in a cumulatively considerable contribution to impacts on regional biological resources. The District would implement mitigation measures intended to avoid and/or minimize as appropriate all significant impacts on biological resources, including requirements to conduct pre-construction surveys by qualified personnel and avoid special-status. With the implementation of these measures, the proposed Menlo Park Small High School Project's contribution to impacts on biological resources would not be cumulatively considerable.

12.2.5 Cultural / Tribal Cultural Resources

The Menlo Park Small High School Project would not impact any known cultural or tribal cultural resource but does have the potential to disturb unrecorded historical archaeological, paleontological, and tribal cultural resources and/or unrecorded human remains during construction activities. All other projects listed in Table 12-1 would have a similar potential to disturb unrecorded resources; however, implementation of the Menlo Park Small High School Project would not result in a cumulatively considerable contribution to impacts on cultural and tribal cultural resources. The District would implement Mitigation Measure CUL-1A through 1C to avoid and/or minimize as appropriate all significant impacts on cultural resources, including requirements to consult with Native American tribes, and stop work in the event unrecorded resources are discovered. With the implementation of these measures, the proposed Menlo Park Small High School Project's contribution to impacts on cultural resources would not be cumulatively considerable.

12.2.6 Geology and Soils

Geologic and soils hazards are largely site specific; however, the Menlo Park Small High School Project and the Bay Area in general are subject to potential regional geologic and soils risks. The District (as required) has performed geological and soil engineering studies for the construction of the school building and would submit plans to the Division of the State Architect for review with applicable fire and life safety design requirements. All other projects listed in Table 12-1 could be subject to potential soils and geologic hazards such as erosion and fault rupture; however, the magnitude of this risk would be dependent on the site-specific conditions present at each specific project area. Regardless of the potential risk, each cumulative project would be required to implement design and construction practices intended to reduce and or avoid site-specific geologic and soils risks (either through compliance with general plan policies and local building code, or through the implementation of measures). These design and construction practices would render the site-specific risks posed by local and regional hazards such as ground shaking, liquefaction, and other soils and geologic-related conditions as less than significant for each project and would prevent significant cumulative impacts from occurring.

12.2.7 Greenhouse Gases and Energy

Unlike air quality, which is influenced by local and regional factors and is therefore considered on the local or regional scale, the effects of global climate change are the result of GHG emissions worldwide; individual projects do not generate enough GHG emissions to influence global climate change. Thus, the analysis of GHG emissions is by nature a cumulative analysis focused on whether an individual project's contribution to global climate change is cumulatively considerable. As described in 3.3.4, the Menlo Park Small High School Project would not result in direct or indirect GHG emissions that have a significant effect on the environment or conflict with an applicable GHG reduction plan, policy, or regulation and, therefore, would not result in cumulative considerable GHG impacts.

12.2.8 Hazards and Hazardous Materials

The Menlo Park Small High School Project includes demolishing an older building and structures which could contain asbestos and/or lead paint which are considered hazardous materials. Mitigation Measure HAZ-1B would reduce this impact to a less than significant level. During demolition and site grading, the project could release previously unidentified contamination, which could result in a potentially significant impact. Mitigation HAZ-1A would reduce this impact to a less than significant level. All other potential project-related impacts from hazards and hazardous materials would be less than significant (see Chapter 8). The site's use as a high school would include the storage and/or handling of hazardous materials (cleaning agents, lab chemicals). Hazardous materials spill prevention and response measures contained within the SWPPP or erosion/pollution control plan (see Chapter 9) would prevent potential impacts related to the accidental release of hazardous materials during construction. All of the potential hazards and hazardous material impacts from projects listed in Table 12-1 would be mitigated with measures similar to those of the proposed project such as the preparation and implementation of a SWPPP and building surveys for asbestos and lead-based paint (required by BAAQMD regulations), and implementation of protocols for the safe storage and handling of hazardous materials from the local fire department. Therefore, project impacts from hazards and hazardous materials would not be cumulatively significant.

12.2.9 Hydrology and Water Quality

All potentially significant project-related impacts to hydrology and water quality would be reduced to less than significant levels with implementation of Mitigation Measure HYD-1 (see Chapter 9). Potential project construction-related impacts to hydrology and water quality including erosion and siltation or the release of hazardous materials would be prevented by the preparation and implementation of a SWPPP (for project phases with more than one acre of ground disturbance) or erosion/pollution control plan (for project phases with less than one acre of ground disturbance). The proposed project would replace existing structures and reduce existing impervious surfaces at the site by approximately eight percent. The proposed project would not impact groundwater, or be at risk of inundation by seiche, tsunami or mudflow. The proposed project is at risk of future inundation / increase flood levels associated with sea level rise. Mitigation Measure HYD-1 would raise the lowest finished floor elevation of the building at least one foot above the existing base flood elevation.

Although the proposed projects listed in Table 12-1 could have similar potential construction- and operation-related impacts to hydrology and water quality, these projects would be required to comply with the same regulations as the proposed project to prevent water pollution or increases in storm water run-off per the requirements of the NPDES permits issued to San Mateo and Santa Clara Counties and their member towns and cities. This could include the preparation and implementation of a SWPPP or erosion/pollution control plan and Storm Water Control Plan or similar measures as applicable to the individual project. In addition, the project sites of the projects listed in Table 12-1 are generally already developed with existing buildings and largely covered with existing impervious surface area. Therefore, the potential cumulative increase in impervious surface area from all the projects is not expected to be substantial or would be mitigated through on site design measures. Thus, the proposed project is not expected to result in cumulatively considerable impacts to hydrology and water quality when combined with the other projects listed in Table 12-1.

12.2.10 Land Use and Planning

All potential project-related impacts to land use and planning would be less than significant (see Chapter 3). The Menlo Park Small High School Project would not conflict with the zoning or General Plan land use designations for the site. The proposed project would not physically divide an established community or conflict with any Habitat Conservation Plan or Natural Community Conservation Plan. As such, the proposed project would not have any impacts to land use and planning that could be cumulatively considerable.

12.2.11 Mineral Resources

Implementation of the Menlo Park Small High School Project would have no impact to mineral resources (see section 3.3.6) and, therefore, would not contribute to cumulative impacts on these resources.

12.2.12 Noise

The proposed project would not result in significant noise impacts. With the exception of the Greystar Project, the Menlo Gateway Project, and the Facebook Campus Expansion Project, all the projects in Table 12-1 are more than 0.5 miles away from the proposed project site and would not have any potential noise impacts that could combine with the proposed project due to the distance between the projects. The projects listed and the proposed high school are in an area currently used by offices and light industrial uses; there are no residences in the local vicinity. For these reason, the proposed project is not expected to result in cumulatively significant noise impacts at sensitive receptor locations.

12.2.13 Population and Housing

Implementation of the Menlo Park Small High School Project would not induce population growth or displace housing or people (see 3.3.7) and, therefore, would not contribute to any cumulative impacts to population and housing.

12.2.14 Public Services and Utilities

The City's General Plan update (ConnectMenlo) Draft EIR identifies that the proposed general plan updates would not result in significant cumulative impacts to City services in general and the Bayfront Area specifically. The proposed Menlo Park Small High School Project would not cause or contribute to population growth in the City or the Bayfront Area and would not trigger the need for new fire or police staff within the Bayfront Area service territories. The proposed project would not result in a cumulatively considerable contribution to public service impacts. The West Bay Sanitary District has noted that sanitary sewer lines serving the proposed school may need to be upsized to provide sufficient sanitary sewer service. Some of the projects listed in Table 12-1 could contribute sanitary sewer flows to the same lines that serve the proposed Menlo Park Small High School Project, resulting in potentially significant cumulative impacts to these facilities; however, implementation of the proposed project would not result in a cumulatively considerable contribution to impacts on these utility systems. The District would implement mitigation measures PSU-1A and PSU-1B, which are intended to avoid and/or minimize as appropriate all potentially significant impacts resulting from increases in sanitary sewer flows, including requirements for water-saving devices and facilities that can hold or divert sanitary sewer flows in less impactful ways. With the implementation of these measures, the proposed project's contribution to impacts on utilities and service systems would be less than significant.

12.2.15 Recreation

The proposed project would not include the construction of new off-site recreational facilities, but may result in the use of existing public park and other community athletic facilities if and athletic teams are established at the proposed school. The school's potential use of public park and other community athletic facilities would combine with the use from other past, present, and reasonably foreseeable residential projects near the City of Menlo Park's Bayfront Area. The proposed Menlo Park Small High School's use of these existing facilities would be consistent with available facilities and subject to negotiations and/or conditions with the facilities' primary owners / caretakers, and would therefore not result in the cumulatively considerable contribution to the accelerated deterioration of any park or other community athletic facility.

12.2.16 Traffic/Transportation

As stated in Chapter 4, Transportation, implementation of the Menlo Park Small High School Project would add up to 322 AM peak hour trips and 174 PM peak hour trips to the roadway system at full enrollment (400 students during the 2021-22 school year). The transportation impact analysis (TIA) prepared for the Menlo Park Small High School Project identifies that the addition of these trips would result in potentially significant impacts to 11 intersections (from unacceptable LOS), four roadway segments (from increased traffic that exceeds roadway capacity), one route of regional significance (from an increase in roadway volume to capacity), and two freeway interchanges (from the addition of traffic to an on-ramp already operating at a substandard level) under existing plus project and near-term plus project conditions (2018 and 2021). Even with implementation of Mitigation Measures TRA-1A through 1C, this impact would remain significant and unavoidable.

The TIA prepared for the Menlo Park Small High School Project also evaluated the increase in vehicle trips resulting from the Menlo Park Small High School Project under cumulative and cumulative plus project conditions (see Appendix C). The cumulative scenario includes an analysis of projected traffic volumes for the horizon year of 2024. This scenario includes traffic that would be generated by approved developments identified in the near term scenario, traffic that would be generated by developments currently pending approval, as well as a growth rate of one percent per year to account for growth in regional traffic. A list of these projects was provided by staff from the City of Menlo Park.

Impact CML-1: The Menlo Park Small High School Project would add peak hour and daily trips to the circulation and transportation system in the vicinity of the school site under cumulative conditions.

The TIA prepared for the Menlo Park Small High School Project identifies that the addition of 322 AM peak hour trips and 174 PM peak hour trips to the roadway system would result in potentially significant impacts to 11 intersections (from unacceptable LOS), four roadway segments (from increased traffic that exceeds roadway capacity), one route of regional significance (from an increase in roadway volume to capacity), and two freeway interchanges (from the addition of traffic to an on-ramp already operating at a substandard level) under cumulative conditions. These impacts are summarized in Table 12-2 (intersection LOS), Table 12-3 (roadway segment volumes), Table 12-4 (regional routes of significance), and Table 12-5 (freeway interchange LOS).

Table 12-2 Cumulative Plus Project Conditions – Intersection Level of Service			
Study Intersection	**Jurisdiction**	**Unacceptable LOS?[(A)]**	
		AM	**PM**
1. Bayfront Expressway and Marsh Road	CMP / State	**Yes[(A)]**	**Yes[(A)]**
2. Constitution Drive and Independence Drive	Menlo Park	**Yes[(A)]**	No
3. U.S. 101 NB Ramps and Marsh Road	State	**Yes[(A)]**	**Yes[(A)]**
4. U.S. 101 SB Ramps and Marsh Road	State	**Yes[(A)]**	**Yes[(A)]**
5. Bayfront Expressway and Chrysler Drive	State	No	**Yes[(A)]**
6. Constitution Drive and Chrysler Drive	Menlo Park	**Yes[(A)]**	**Yes[(A)]**
7. Jefferson Drive and Chrysler Drive	Menlo Park	No	**Yes[(A)]**
8. Independence Drive and Chrysler Drive	Menlo Park	No	**Yes[(A)]**
9. Constitution Drive and Jefferson Drive	Menlo Park	No	**Yes[(A)]**
10. Bayfront Expressway and Chilco Street	State	**Yes[(A)]**	**Yes[(A)]**
11. Constitution Drive and Chilco Street	Menlo Park	**Yes[(A)]**	**Yes[(A)]**

Source: Hexagon 2016 (see Appendix C Table 30)

(A) A "No" indicates the intersection would operate at an acceptable LOS with and without project traffic. A "Yes" indicates the intersection would operate at an unacceptable LOS with and without project traffic, but the project would not contribute significantly to this condition. A bold "Yes" indicates the project contributes to a potentially significant impact because the addition of project-related traffic would cause an intersection to exceed the applicable intersection impact criteria listed in Section 4.4.1.1 (e.g., degrade an intersection from an acceptable to an unacceptable LOS or add traffic that exceeds other applicable standards, such as a volume to capacity threshold).

Table 12-3 Cumulative Conditions – Roadway Segments (Average Daily Traffic)			
Roadway Segment	**Classification**	**Roadway Volume[(A)]**	
		No Project	**Plus Project**
1. Jefferson Drive, south of Chrysler Drive	Local	**2,540**	**2,928[(B)]**
2. Chrysler Drive, between Jefferson Drive and Constitution Drive	Local	**8,800**	**9,150[(B)]**
3. Chrysler Drive, between Constitution Drive and Bayfront Expressway	Collector	**14,840**	**15,151[(B)]**
4. Independence Drive, north of Chrysler Drive	Local	**5,900**	**5,939[(B)]**
5. Constitution Drive, between Jefferson Drive and Chilco Street	Collector	5,750	5,810
6. Chilco Street, between Constitution Drive and Bayfront Expressway	Collector	**10,140**	**10,168**

Source: Hexagon 2016 (see Appendix C, Table 32)

(A) A bold value indicates the roadway volume exceeds the road class capacity listed in Table 4-9.

(B) The project would contribute to a potentially significant impact because the addition of project-related traffic would exceed road segment impact criteria listed in Section 4.4.1.2.

Table 12-4 Cumulative Conditions – Regional Routes of Significance		
Route	**AM Peak Hour LOS and V/C(A)**	
	No Project	**Plus Project**
Bayfront Expressway, between Willow Road and U.S. 101	**E / (0.920)**	**E / (0.958)**

Source: Hexagon 2016 (see Appendix C, Table 33)

(A) Bold values indicated a potentially significant impact because the addition of project traffic would cause or contribute to unacceptable impact criteria listed in Section 4.4.1.3.

Table 12-5 Cumulative Plus Project Conditions – U.S. 101 Freeway Interchanges	
Scenario / Route	**Peak Hour LOS and V/C(A)**
Northbound On-Ramp from Westbound Marsh Road	
AM Peak Hour	**F / 1.911**
PM Peak Hour	**F / 1.086**
Southbound On-Ramp from Westbound Marsh Road	
PM Peak Hour	**E / 0.968**

Source: Hexagon 2016 (see Appendix C, Table 34)

(A) Bold values indicated a potentially significant impact because the addition of project traffic would cause or contribute to unacceptable impact criteria listed in Section 4.4.1.4.

As described in Chapter 4, the District considers travel demand management and trip reduction measure to be appropriate and feasible for the Menlo Park Small High School Project. To reduce the potential increase in vehicle trips associated with implementation of the Menlo Park Small High School Project under cumulative plus project conditions, the District shall implement Mitigation Measures TRA-1A, TRA-1B, and TRA-1C described in Chapter 4. These would require the District and/or Menlo Park Small High School to take steps to avoid and/or reduce vehicle trips associated with the implementation of the project; however, the reduction in vehicle trips that would occur would not fully offset the increase in trips that could under the project, and some measures may yield no trip reductions after coordination with other agencies and entities. As such, these measures may not fully reduce the potentially significant impacts on the intersections, roadway segments, regional routes of significance, and freeway on-ramps listed in Table 12-2 to Table 12-5. Impact CML-1, therefore, is considered a significant and unavoidable impact.

CHAPTER 13 ALTERNATIVES

13.1 ALTERNATIVES SELECTION

CEQA Guidelines Section 15126.6 states that an EIR shall describe a range of reasonable alternatives to a project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. An EIR does not need to consider every conceivable alternative, but must foster informed decision making and public participation. CEQA intends for the alternatives discussion to focus on alternatives that are capable of avoiding or substantially reducing any significant effects of the project, even if these alternatives would impede to some degree attaining the objectives of the project.

In selecting the range of reasonable alternatives analyzed by this EIR, the SUHSD identified potential alternatives that could feasibly attain most of the basic objectives for the proposed Menlo Park Small High School Project and potentially avoid or substantially lessen the proposed project's significant effects. The SUHSD considered alternative locations, alternative strategies, and an alternative project schedule. The District also considered the No Project Alternative required by CEQA. The selection of these alternatives was informed by written comments received during the EIR scoping process (see Section 3.2). In total, the District identified five alternatives, three of which were rejected and not discussed in detail. The project objectives, significant effects to be avoided or lessened, and alternatives are discussed below. Table 13-1 at the end of this chapter compares the proposed project against the two alternatives analyzed in detail in sections 13.3 and 13.4.

13.1.1 Summary of Project Objectives and Significant Effects

The SUHSD's objectives for the proposed Menlo Park Small High School Project are:

1) To maintain the SUHSD's commitment to education excellence and to continue a strong and varied curriculum that prepares students to graduate and be successful in college and professional careers.
2) To support preparation and planning for expected future increase in student enrollment within the SUHSD.
3) To establish a new small school site in the southern part of the SUHSD that helps alleviate potential overcrowding at Menlo-Atherton High School and Sequoia High School.
4) To establish a new small high school that uses a career technical education / linked learning approach and emphasizes a design, technology, and engineering instruction and curriculum.

As described in Chapter 4 – Chapter 12 of this EIR, the implementation of the Menlo Park Small High School Project would result in up to 11 potentially significant environmental impacts in eight different resource areas. Two impacts were found to be unavoidable, significant impacts of the project, even with the application of feasible mitigation measures. These impacts are:

- ***Impact TRA-1: The Menlo Park Small High School Project would add peak hour and daily trips to the circulation and transportation system in the vicinity of the school site.***

  Impact TRA-1 identifies that implementation of the Menlo Park Small High School Project would add up to 56 AM peak hour trips and 19 PM peak hour trips to the roadway system during its initial year of operation, when enrollment would be approximately 100

students (anticipated to be the 2018-2019 school year), and up to 322 AM peak hour trips and 174 PM peak hour trips to the roadway system at full enrollment (400 students during the 2021-22 school year). The TIA prepared for the project identifies that the addition of these trips would result in potentially significant impacts to 11 intersections (from unacceptable LOS), four roadway segments (from increased traffic that exceeds roadway capacity), one route of regional significance (from an increase in roadway volume to capacity), and two freeway interchanges (from the addition of traffic to an on-ramp already operating at a substandard level) under existing plus project and near-term plus project conditions (2018 and 2021). Mitigation Measures TRA-1A, TRA-1B, and TRA-1C would require the SUHSD and/or the Menlo Park Small High School to take steps to avoid and/or reduce vehicle trips generated by school students, faculty, and staff; however, the reduction in vehicle trips would not fully offset project trips, and some measures may yield no trip reductions if they are found not be feasible for the school. As such, these measures may not fully reduce the potentially significant impacts on the intersections, roadway segments, regional routes of significance, and freeway interchanges. Impact TRA-1, therefore, is considered a significant and unavoidable impact of the project.

- ***Impact CML-1: The Menlo Park Small High School Project would add peak hour and daily trips to the circulation and transportation system in the vicinity of the school site under cumulative conditions.***

  Impact CML-1 identifies that project's trip generation at full build-out (400 students) would result in potentially significant impacts to 11 intersections, four roadway segments, one route of regional significance, and two freeway interchanges under cumulative plus project conditions. Mitigation Measures TRA-1A, TRA-1B, and TRA-1C would reduce the amount of vehicle trips generated from implementation of the Menlo Park Small High School Project, but not to a level that would avoid cumulatively significant impacts to intersections, roadway segments, regional routes of significance, and freeway interchanges.

In addition, implementation of the Menlo Park Small High School Project would result in nine potentially significant impacts, but the inclusion of mitigation measures renders these impacts less than significant:

- ***Impact AIR-1: Implementation of the Menlo Park Small High School Project would generate criteria air pollutant emissions.***
- ***Impact BIO-1: Implementation of the proposed project could result in impacts to nesting birds, and roosting bats.***
- ***Impact CUL-1: Project construction could disturb unrecorded historical, archaeological, paleontological, and tribal cultural resources and/or unrecorded human remains.***
- ***Impact HAZ-1: Construction and operation of the Menlo Park Small High School could result in the release or potential release of hazardous materials that pose a risk to human health and/or the environment.***
- ***Impact HYD-1: The proposed project is at risk of future inundation from sea level rise.***

- ***Impact PSU-1: The Menlo Park Small High School Project would increase wastewater generation at the site and could result in new or expanded wastewater facilities.***
- ***Impact TRA-2: The Menlo Park Small High School Project could cause or contribute to conflicts and/or dangerous interactions between pedestrians, bicyclists, and vehicles.***
- ***Impact TRA-3: The Menlo Park Small High School could result in result in indirect environmental effects resulting from a parking shortage.***

The District considered both siting and design alternatives that could avoid or substantially lessen the significant effects listed above.

13.2 ALTERNATIVES CONSIDERED BUT REJECTED

CEQA Guidelines establish that an EIR should identify alternatives considered but rejected by the Lead Agency and briefly explain the reasons the Lead Agency rejected the alternatives. Factors that may be taken into account when eliminating an alternative from detailed consideration include failure to meet most of the basic project objectives, infeasibility, or inability to avoid significant environmental impacts. Furthermore, factors affecting feasibility include site availability and suitability (for school use), economic viability, potential to lead school / campus under-utilization or over-crowding, and the District's obligation to provide free school education in accordance with the California Constitution.

13.2.1 Construction of a New Comprehensive High School Campus

The proposed Menlo Park Small High School Project is needed to accommodate the growth in student enrollment forecast to occur within the District in the near future. The construction of a new comprehensive high school campus would first require the District to acquire, through purchase or eminent domain, approximately 30 acres of land or more (for an approximately 2,000 student high school) that is: 1) suitable for school development (i.e., free of hazardous waste or materials or, if it does contain such materials, could be feasibly cleaned-up), and 2) situated far enough away from existing campuses such that there is sufficient enrollment at the new campus (i.e., isn't under-utilized). The District, as part of its 2014 Measure A Bond process, preliminarily searched for areas where approximately 30-acres of land could be acquired; the only area that was considered potentially feasible what was the Salt Works restoration area of Redwood City. Most of this area is already planned for development in the Redwood City General Plan, and the District estimates the total cost to acquire and build a new comprehensive high school to be approximately $300 million dollars. Thus, the acquisition of 30 acres of land or more within the District's boundary is considered infeasible at this time because such a large parcel or parcels of land are not available or economically viable. Furthermore, the construction of this new facility is likely to result in higher magnitude air quality, hydrology and water quality, noise, and traffic impacts because it would involve the construction of larger facilities and result in a larger high school (more than 400 students). Thus, this alternative would also not avoid or substantially lessen the significant and unavoidable impacts of the proposed project. For these reasons, the District has rejected this alternative from further consideration.

13.2.2 Redistricting

In 2014, the District adopted new attendance boundaries for each of its four comprehensive high schools – Menlo-Atherton High School, Carlmont High School, Sequoia High School, and Woodside High School. These new boundaries took effect with the start of the 2015-2016 school year, and the growth in enrollment forecast to occur at these comprehensive high schools is

based on these new attendance areas. The new attendance areas were designed to both accommodate and distribute the increase in student enrollment forecast to occur throughout the District, avoiding overcrowding at any one school, but also ensuring existing school facilities are not under-utilized.

The closest high schools to the Menlo Park Small High School Project are Menlo-Atherton High School, Sequoia High School, and Woodside High School. The District anticipates that population growth within these schools' attendance areas would add approximately 58, 178, and 133 students, respectively, to these schools by 2021. The District has prepared master plans for these campuses to accommodate this increase in growth. Each of these schools are currently at or close to capacity and it is difficult to accommodate an additional 400 students on top of the already forecasted increase in enrollment expected to occur at these campuses. The District does not consider it viable to redistrict school attendance boundaries again to shift additional students to any other comprehensive high school. This alternative would not achieve any of the specific objectives set for the Menlo Park Small High School Project. In addition, redistricting would likely increase air quality and traffic impacts if students that currently reside near the proposed Menlo Park Small High School were forced to travel farther to reach other school campus, and would therefore not avoid or substantially lessen the significant and unavoidable impacts of the proposed project. For these reasons, the District has rejected this alternative from further consideration.

13.2.3 Reduced Project Alternative

Under the Reduced Project Alternative, the SUHSD would build a high school in the same location (150 Jefferson Drive), but with the potential to support fewer students. While this alternative would achieve most of the objectives set for the proposed project, the TIA prepared for the project evaluated traffic impacts with only 100 students and concluded the project would result in substantially the same magnitude of impact at intersections, roadways, freeway facilities, and regional routes of significance as the proposed project. Accordingly, the Reduced Project Alternative would not avoid or substantially lessen the proposed project's significant and unavoidable traffic impacts. For this reason, the District has rejected this alternative from further consideration.

13.3 NO PROJECT ALTERNATIVE

Under the No Project Alternative, the population growth within the SUHSD boundary that is driving the increase in enrollment at District high schools, and all the elementary and middle schools that feed into the District, would continue to occur; however, the District would not construct and operate the proposed Menlo Park Small High School Project. As a result, the District would be forced to accommodate the 400 students planned to attend the proposed school at other District high schools by either adding portable classrooms or constructing new classroom facilities.

As noted in section 13.2.1, the SUHSD has recently completed a facility master plan process for each of its comprehensive high schools. This master planning process was intended to maximize available campus space in order to accommodate the anticipated increase in student enrollment expected to occur at these campuses. When evaluating potential locations where new or replacement buildings could be installed, the District generally followed a set of siting principles as guide; the facility master plans prepared for each campus avoided reducing the size of parking and play fields where possible, maintained appropriate setbacks between structures, and

proposed additions that were in scale with, and contributed to, the quality of the campus environment. These principles restrict the areas on a campus where new or replacement buildings can be constructed and generally necessitate the construction of two-story structures (or taller) to accommodate increasing enrollment within the SUHSD. With these principles in mind, it may not be feasible for the SUHSD to add new facilities capable of supporting an additional 400 students at its other existing campuses.

Presuming the District can add portable classrooms, find space for new classroom buildings, or replace one-story classroom buildings with multi-story structures, the No Project Alternative would not, presumably, satisfy and attain most of the objectives for the Menlo Park Small High School Project. By taking no action, the District would not be supporting preparation and planning for future increases in student enrollment within the SUHSD to fullest extent possible, would not establish a small school site in the southern part of the SUHSD that would alleviate potential overcrowding at Menlo-Atherton High School and Sequoia High School, and would not establish a small high school that uses a career technical education / linked learning approach and emphasizes a design, technology, and engineering instruction and curriculum. Thus, the No Project Alternative would not obtain most of the basic objectives of the proposed project.

The No Project Alternative would likely avoid or substantially lessen the potentially significant, air quality, biology, cultural resources, hazards, flooding, and public service and utility impacts of the proposed project. This is due to the fact that, under the No Project Alternative, the District would not demolish buildings that contain hazardous materials such as asbestos. In addition, the installation of modular or portable classrooms would be expected to require less overall site preparation, ground disturbance, and building construction activities, reducing construction equipment emissions and potential for equipment leaks and spills. In addition, since these activities would occur at existing campuses, the potential or disturbing biological resources is considered low, although the proposed Menlo Park School Site does not support may biological resources either.

The No Project Alternative may also lessen the significant and unavoidable impacts on intersections, roadway segments, freeway facilities, and regional routes of significance that would occur under the proposed project. This is because increases in student enrollment would likely be distributed throughout each of the District's four comprehensive high schools and other facilities, meaning potential increases in vehicle trips would be spread through the roadway system. The District notes, however, that the local traffic conditions at certain schools, particularly Menlo-Atherton High School, Sequoia High School, and Carlmont High School face existing traffic problems, and the addition of 50, 100, or more students may result in a significant addition of vehicle trips to the local roadway system around these schools. With this in mind, the No Project Alternative would likely result in similar potentially significant vehicle / pedestrian conflicts and indirect environmental effects from a lack of parking as the proposed project. This is because additional the District's campuses that already support thousands of students that have limited parking and little to no ability to add parking areas.

13.4 DIFFERENT SMALL HIGH SCHOOL SITE

Under the Different Small High School Site Alternative, the SUHSD would develop a small high school capable of accommodating 400 students and 35 faculty and staff, but in a different location. As indicated in section 13.2.1, as part of its 2014 Measure A Bond process, the SUHSD preliminarily searched for areas where approximately 30-acres of land could be acquired for the purposes of developing a new comprehensive high school. At this time, the SUHSD also searched for properties that could support smaller high school facilities. Two such properties

were deemed viable for acquisition and preliminarily investigated for their suitability as a school site: 150 Jefferson Drive (the proposed Menlo Park Small High School site), which the SUHSD purchased for approximately $9.3 million, and 535 Old County Road, an approximately 0.8-acres site in San Carlos, which the SUHSD purchased for approximately $3.4 million (TRA Environmental Sciences 2014a, 2014b). For the purposes of this EIR, it is not considered economically feasible for the SUHSD to purchase another parcel of land given the financial resources expended to acquire the two properties listed above. Thus, for the purposes of this EIR, the different high school site would be located on at 535 Old County Road, in the City of San Carlos, which the SUHSD currently owns.

535 Old County Road is an approximately 0.8-acre parcel of land currently zoned Neighborhood Mixed Use" by the City of San Carlos. The site is surrounded by developed office, residential, park, and transit-oriented lands, including the Caltrain San Carlos Station. The City of San Carlos is proceeding with the San Carlos Transit Village project, which is in close proximity to the site. This project consists of mix-used development between the Caltrain right-of-way and El Camino Real, on the north and south sides of Holly Street (City of San Carlos 2014). The site is approximately 0.33 miles west of Highway 101,180 feet southeast of Holly Street, and 250 feet northeast of the El Camino Real. Holly Street and El Camino Real have average daily traffic volume of approximately 25,200 and 26,400 vehicles per day, respectively. 535 Old County Road is also located near railroad lines (70 feet from Caltrain), San Carlos Airport (0.44 nautical miles), and high pressure natural gas lines (under Old County Road).

The Different Small High School Site Alternative would not avoid or substantially lessen most of the proposed project's impacts. The 535 Old County Road site (0.8 acres) is smaller than 150 Jefferson Drive (2.1 acres) and would thus likely require the development of a four-story or higher school to support the same number of students, which could have a substantial adverse change to the visual character and quality of the site (since it is partially surrounded by a residential area and would be visible from sensitive residential areas).

Development of the 535 Old County Road site would likely result in similar air quality, biological, and cultural resources impacts, because development would still involve construction that would generate dust and could disturb nesting birds and/or unknown cultural resources; although the magnitude of fugitive dust impacts would likely not change, the emissions would occur in closer proximity to sensitive receptors than the proposed project and thus could be more of a nuisance.

The Different Small High School Site Alternative may result in greater magnitude hazards / hazardous material impacts because the 535 Old County Road site is closer to rail roads, natural gas pipelines, and airports than the 150 Jefferson Drive site. Although the 535 Old County Road site is not located in flood hazard area, and is not anticipated to be impacted by changes in sea/bay level (thus avoiding a potentially significant impact of the proposed project), it would result in greater noise and vibration impacts because adjacent buildings are closer to the site than the proposed project (less than 30 feet), and there are nearby sensitive residential receptors that would be impacted by project construction noise, construction vibration, and operational noise levels.

The Different Small School High School Site Alternative would be unlikely to avoid or lessen the proposed project's significant and unavoidable traffic impacts, potentially significant traffic impacts, or potentially significant public services and utility impacts. Traffic near Old County Road and Holly Street is congested and intersections are likely operating at unacceptable levels of service. Thus, the addition of vehicle trips to the roadway system surrounding 535 Old County

Road is likely to result in significant and unavoidable traffic impacts. In addition, since 535 Old County Road is smaller than 150 Jefferson Drive, the development of a school in this location would likely face greater on-site parking deficits than the proposed project. Development of 535 Old County Road would also increase use of site utilities and may therefore require upsizing of utility lines to support school development.

The Different Small High School Site Alternative would achieve most of the basic objectives of the project. Developing a small high school at 535 Old County Road would maintain the SUHSD commitment to educational excellence, support preparation and planning for increases in student enrollment, and establish a small high school that uses a CTE / linked learning approach; however, this alternative would not establish a small high site in the southern part of the District. Establishing a small high school site in the southern part of the District is imperative because Menlo-Atherton High School and Sequoia High School are constrained campuses that have little to no ability to expand and /or add capacity. In addition, the development of a small high school in the northern part of the District was not pursued because the San Mateo Union High School District (in conjunction with Oracle) recently opened its Design Tech High School Burlingame and the success of this school has led plans by Oracle to develop a second design tech school at Oracle's facilities in Redwood Shores. Both of these schools would be open to SUHSD students, which avoids the need to develop a small high school in the northern part of the District.

13.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

A comparison of the proposed Program against the two alternatives discussed in detail above is presented in Table 13-1.

Table 13-1 Comparison of Proposed Project Impacts against Project Alternatives

Resource	Proposed Project	No Project Alternative	Alternate Location
Aesthetics	LTS	No Change	**More Severe**
Agriculture	No Impact	No Change	No Change
Air Quality	LTSM	No Change	**More Severe**
Biology	LTSM	Lessened	No Change
Cultural	LTSM	Lessened	No Change
Geology	LTS	No Change	No Change
GHG	LTS	No Change	No Change
Hazards	LTSM	Lessened	**More Severe**
Hydrology	LTSM	Avoided	Lessened
Land Use	LTS	Avoided	No Change
Minerals	No Impact	No Change	No Change
Noise	LTS	No Change	**More Severe**
Public Services and Utilities	LTSM	Avoided	No Change
Recreation	LTS	No Change	No Change
Traffic	**SU**	Possibly Lessened	**Same**
Meets Project Objectives?	**All**	**Few**	**Most**

Table Legend: LTS = Less than significant impact; LTSM = Less than significant impact with mitigation; PS = Potentially significant impact: SU = Significant and unavoidable impact

As shown in Table 13-1, the No Project Alternative is the least environmentally damaging alternative because it lessens many of the impacts that would occur with implementation of the

Menlo Park Small High School Project; however, it only achieves a few of the objectives for the proposed project. The alternate small high school location would obtain most of the proposed project's objective but, on balance, would not avoid or substantially lessen the proposed project's impacts and is likely to result in higher magnitude impacts than the proposed project. As a result, the proposed project is considered the environmentally superior alternative.

CHAPTER 14 OTHER CEQA CONSIDERATIONS

14.1 POTENTIALLY UNAVOIDABLE SIGNIFICANT IMPACTS

CEQA Guidelines Section 15126(a) and (b) require an EIR to discuss the significant environmental effects of the proposed project and the significant environmental effects which cannot be avoided if the proposed project is implemented.

All potentially significant impacts of the project are identified in Chapters 4 – 12 of this EIR, along with mitigation measures to reduce or avoid these impacts. Even with the application of mitigation measures, the proposed Menlo Park Small High School Project, if implemented, would result in two unavoidable, significant impacts:

- ***Impact TRA-1: The Menlo Park Small High School Project would add peak hour and daily trips to the circulation and transportation system in the vicinity of the school site.***

  Impact TRA-1 identifies that implementation of the Menlo Park Small High School Project would add up to 56 AM peak hour trips and 19 PM peak hour trips to the roadway system during its initial year of operation, when enrollment would be approximately 100 students (anticipated to be the 2018-2019 school year), and up to 322 AM peak hour trips and 174 PM peak hour trips to the roadway system at full enrollment (400 students during the 2021-22 school year). The TIA prepared for the project identifies that the addition of these trips would result in potentially significant impacts to 11 intersections (from unacceptable LOS), four roadway segments (from increased traffic that exceeds roadway capacity), one route of regional significance (from an increase in roadway volume to capacity), and two freeway interchanges (from the addition of traffic to an on-ramp already operating at a substandard level) under existing plus project and near-term plus project conditions (2018 and 2021). Mitigation Measures TRA-1A, TRA-1B, and TRA-1C would require the SUHSD and/or the Menlo Park Small High School to take steps to avoid and/or reduce vehicle trips generated by school students, faculty, and staff; however, the reduction in vehicle trips would not fully offset project trips, and some measures may yield no trip reductions if they are found not be feasible for the school. As such, these measures may not fully reduce the potentially significant impacts on the intersections, roadway segments, regional routes of significance, and freeway interchanges. Impact TRA-1, therefore, is considered a significant and unavoidable impact of the project.

- ***Impact CML-1: The Menlo Park Small High School Project would add peak hour and daily trips to the circulation and transportation system in the vicinity of the school site under cumulative conditions.***

  Impact CML-1 identifies that project's trip generation at full build-out (400 students) would result in potentially significant impacts to 11 intersections, four roadway segments, one route of regional significance, and two freeway interchanges under cumulative plus project conditions. Mitigation Measures TRA-1A, TRA-1B, and TRA-1C would reduce the amount of vehicle trips generated from implementation of the Menlo Park Small High School Project, but not to a level that would avoid cumulatively significant impacts to intersections, roadway segments, regional routes of significance, and freeway interchanges.

14.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines Section 15126(c) and 15126.2(c) require an EIR to discuss significant irreversible changes which would be caused by implementation of the Menlo Park Small High School Project.

Demolition activities, by their very nature, result in irreversible changes. The removal of existing buildings from 150 Jefferson Drive, and the corresponding construction of new facilities, would result in irreversible environmental changes.

In addition, implementing the Menlo Park Small High School Project would result in use non-renewable energy resources such as fuel (gasoline and diesel) and oil for construction equipment and student / staff vehicles; however, this incremental increase in use of these resources would not interfere with regional supplies and availability of these resources.

The Menlo Park Small High School Project does not result in any primary or secondary changes in land use that would commit future generations to a new land use or increase access to previously inaccessible areas.

Implementation of the Menlo Park Small High School Project would not involve the use of large quantities of flammable or hazardous substances, which if accidentally released, could cause irreversible environmental damage. As described in Chapter 8, the District would implement mitigation measures to ensure hazardous materials such as asbestos and lead do not pose a risk to human health or the environment.

14.3 GROWTH INDUCING IMPACT OF THE PROPOSED PROJECT

CEQA Guidelines section 15126(d) requires an EIR to discuss the growth-inducing impact of the proposed project. As described in section 3.3.6, the Menlo Park Small High School Project would not induce substantial population growth in an area, would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere, and would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. The proposed Menlo Park Small High School Project does not contain any other potential activity or component that would induce growth.

14.4 POTENTIAL INCONSISTENCY WITH OTHER LOCAL PLANS

CEQA Guidelines Section 15125(d) requires an EIR to discuss inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans including, but not limited, to air quality plans, habitat conservation plans, and land use plans for the protection of the Coastal Zone. The proposed project's inconsistency with applicable plans is generally considered and discussed in the setting and impact discussions in Chapters 4 – 11 of this EIR; however, as discussed in section 3.3.5 , Land Use, the SUHSD is a political entity of the state and as such is generally not subject to local land use restrictions and zoning regulations.

CHAPTER 15 REPORT PREPARATION AND AGENCIES / ORGANIZATIONS CONSULTED

15.1 REPORT PREPARERS

This report was prepared under the direction and supervision of the Sequoia Union High School District. The following individuals were involved in the preparation of this report:

Sequoia Union High School District

Matthew Zito, Chief Facilities Officer
Louise Pacheco, Project Manager - Construction

480 James Avenue
Redwood City, CA 94062

MIG | TRA Environmental Sciences, Inc.

Chris Dugan, Senior Project Manager
Megan Kalyankar, Biologist
Phillip Gleason, Analyst
Becca Dannels, Analyst/GIS Specialist
Robert Templar, Archaeologist
JulieAnn Murphy, Architectural Historian

2635 North First Street, Suite 149
San Jose, CA 95134

15.2 PERSONS AND ORGANIZATIONS CONSULTED

Katia McClain, AIA – LPA, Inc.
Gicela Del Rio, T.E. – Hexagon Transportation Consultants, Inc.
Kurt M. Soenen, P.E. – Cornerstone Earth Group, Inc.
Mellan Songco – Staff Toxicologist, Department of Toxic Substances Control
Jon Johnston – Fire Marshal, Menlo Park Fire Protection District
Dave Bertini – Commander, Menlo Park Police Department
Nicole Nagaya, P.E. – Transportation Manager, City of Menlo Park
Kirsten Pinochi - General Manager Recology, San Mateo County Services
David Bohannon – David D. Bohannon Organization

This page intentionally left blank.