SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT

Final Environmental Impact Report for the 2015 Facilities Master Plan Amendment

Prepared by:

San Mateo County Community College District
Facilities Planning and Operations
3401 CSM Drive
San Mateo, CA 94402

Technical Assistance Provided by:

ICF International
620 Folsom Street, 2nd Floor
San Francisco, CA 94107

November 2015

Cañada College

College of San Mateo

Skyline COLLEGE

FINAL ENVIRONMENTAL IMPACT REPORT

SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT

2015 FACILITIES MASTER PLAN AMENDMENT

STATE CLEARINGHOUSE # 2015052007

PREPARED FOR:

San Mateo County Community College District
3401 CSM Drive
San Mateo, CA 94402
Contact: Barbara Christensen
650.574.6560

PREPARED BY:

ICF International
620 Folsom Street, 2nd Floor
San Francisco, CA 94107
Contact: Elizabeth Antin
415.677.7102

November 2015

ICF International. 2015. *San Mateo County Community College District 2015 Facilities Master Plan Update Final Environmental Impact Report.* November. (ICF 00234.15.) San Francisco, CA. Prepared for San Mateo County Community College District, San Mateo, CA.

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Acronyms and Abbreviations

Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CSM	College of San Mateo
EIR	Environmental Impact Report
I-280	Interstate 280
MMRP	Mitigation Monitoring and Reporting Program
NOP	Notice of Preparation
OPR	Office of Planning and Research
Project	San Mateo County Community College District 2015 Facilities Master Plan Amendment
Regional Water Board	San Francisco Bay Regional Water Quality Control Board
SVCW	Silicon Valley Clean Water
TDM	Transportation Demand Management
VMT	vehicle miles travelled

Chapter 1
Introduction

This Final Environmental Impact Report (EIR) for the San Mateo County Community College District 2015 Facilities Master Plan Amendment (Project) has been prepared in compliance with the California Environmental Quality Act (CEQA) and includes the following.

- Draft Environmental Impact Report, August 2015 (bound separately, not reprinted).
- Comments, Responses to Comments, and Revisions to the Draft EIR (this document).

The San Mateo County Community College District is the CEQA lead agency for the Project. As required by CEQA, the Draft EIR was made available to the public and regulatory agencies for review and comment during a 45-day period between August 31, 2015, and October 15, 2015. Per CEQA Guidelines Section 15132, the Final EIR consists of the following elements.

a) The Draft EIR or a revision of the draft.

b) Comments and recommendations received on the Draft EIR either verbatim or in a summary.

c) A list of persons, organizations, and public agencies commenting on the Draft EIR.

d) The response of the Lead Agency to significant environmental points raised in the review and consultation process.

e) Any other information added by the lead agency.

This document contains the comments received on the August 2015 Draft EIR, responses to those comments (refer to Chapter 2), and appropriate revisions to the Draft EIR in the form of an errata (refer to Chapter 3). The August 2015 Draft EIR is incorporated by reference and has been provided on a compact disc inside the back cover of this document.

Chapter 2
Comments and Responses

Comments Received on the Draft EIR

This chapter includes all comments received on the Draft EIR. The comment letters (i.e., commenters) have been numbered as shown in Table 2-1. The individual comments within each letter have been numbered in the right margins.

Table 2-1. List of Commenters

Letter #	Commenter	Date
1	Office of Planning and Research	October 13, 2015
2	California Department of Transportation (Caltrans)	October 12, 2015
3	City of Redwood City	October 15, 2015
4	Town of Woodside	October 15, 2015
5	Gladwyn d'Souza	October 13, 2015
6	Linton Y. Bowie	October 9, 2015
7	Erika Fabre, The Conservation Society	October 10, 2015

Responses to Comments

This chapter also includes responses for each of the numbered comments identified in the comment letters. Each response briefly summarizes the comment, provides a response to the comment, and then identifies if the comment resulted in revisions to the Draft EIR. Revisions are included in Chapter 3, *Text Revisions to the Draft EIR*.

In responding to comments, CEQA does not require a lead agency to conduct every test or perform all research, study, or experimentation recommended or demanded by a commenter. Rather, a lead agency need only respond to significant environmental issues and does not need to provide all information requested by reviewers if that information is not related to environmental issues. The following responses represent a good-faith effort at full disclosure (State CEQA Guidelines Sections 15088, 15204).

Letter 1

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

October 13, 2015

Barbara Christensen
San Mateo County Community College District
3401 CSM Drive
San Mateo, CA 94402

Subject: San Mateo County Community College District 2015 Facilities Master Plan Amendment
SCH#: 2015052007

Dear Barbara Christensen:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on October 12, 2015, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

1-1

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2015052007
Project Title San Mateo County Community College District 2015 Facilities Master Plan Amendment
Lead Agency San Mateo County Community College District

Type EIR Draft EIR

Description San Mateo Community College District has three campuses in San Mateo County, California including Canada College in Redwood City and the Town of Woodside, College of San Mateo (CSM) in the City of San Mateo, and Skyline College in the City of San Bruno. The 2015 Facilities Master Plan Amendment would continue the modernization and renovation work that began with adoption of the District's 2001 and 2006 Facilities Master Plans. The2015 Facilities Master Plan Amendment identifies planned improvements at the three campuses including, but not limited to: building modernization and renovation, building demolition, new building construction, tree removal, landscaping/pedestrian improvements, roadway construction/reconstruction, and changes in parking and roadway reconfiguration.

Lead Agency Contact

Name Barbara Christensen
Agency San Mateo County Community College District
Phone 650-574-6560 **Fax**
email
Address 3401 CSM Drive
City San Mateo **State** CA **Zip** 94402

Project Location

County San Mateo
City Redwood City, Woodside, San Mateo, San Bruno
Region
Lat / Long
Cross Streets Farm Hill Boulevard; West Hillside Boulevard; Skyline Boulevard
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways I-280, SR 84, SR 92
Airports
Railways
Waterways Emerald Lake; Crystal Springs Reservoir; Pacific Ocean
Schools Various
Land Use Existing College Campuses

Project Issues Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Growth Inducing; Landuse; Cumulative Effects; Other Issues

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 3; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Resources, Recycling and Recovery; California Highway Patrol; Caltrans, District 4; Air Resources Board; Regional Water Quality Control Board, Region 2; Department of Toxic Substances Control; Native American Heritage Commission

Date Received 08/28/2015 **Start of Review** 08/28/2015 **End of Review** 10/12/2015

Note: Blanks in data fields result from insufficient information provided by lead agency.

Oct 12 2015 10:41AM HP LASERJET FAX p.1

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr., Governor

CLEAR
10-12-15

DEPARTMENT OF TRANSPORTATION
DISTRICT 4
P.O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 286-5528
FAX (510) 286-5559
TTY 711
www.dot.ca.gov

Serious Drought. Help save water!

RECEIVED
OCT 13 2015
STATE CLEARING HOUSE

October 12, 2015

SMVAR030
SON-VAR-VAR
SCH # 2015052007

Ms. Barbara Christensen
San Mateo County Community College District
3401 CSM Drive
San Mateo, CA 94402

San Mateo County Community College District 2015 Facilities Master Plan Amendment – Draft Environmental Impact Report

Dear Ms. Christensen:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the San Mateo County Community College District (SMCCCD) 2015 Facilities Master Plan Amendment. Caltrans' new mission, vision, and goals signal a modernization of our approach to California's transportation system, in which we seek to reduce statewide Vehicle Miles Traveled (VMT) and increase non-auto modes of active transportation. Our comments seek to promote the State's smart mobility goals and are based on the Draft Environmental Impact Report. Please reference the attached letter dated May 28, 2015 as those comments still apply.

Project Understanding

The SMCCCD 2015 Facilities Master Plan Amendment proposes numerous improvements for the Cañada, Skyline, and San Mateo College (CSM) campuses. These improvements include, but are not limited to the construction of a new health club on the Cañada College campus, a new residential complex on the Skyline Campus (71 units), parking expansion, roadway construction/reconfiguration, and building renovation on all three campuses.

Primary access to the Cañada College campus include Cañada Road, Woodhill Drive, and Farm Hill Boulevard. Interstate 280 (I-280) is located adjacent to Cañada College and can be accessed via I-280 ramps on Farm Hill Boulevard. Access to CSM is gained via West Hillsdale Boulevard, which then connects to adjacent State facility State Route (SR) 92/ J. Arthur Younger Freeway. Access to the Skyline campus is gained via College Drive, which then connects to SR 35/ Skyline Boulevard.

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Transportation Demand Management

Caltrans encourages you to enhance Transportation Demand Management (TDM), including improved transit and pedestrian/bike facilities to reduce regional VMT; thereby reducing traffic impacts on the State Highway System. The project should be conditioned to ensure connections to existing bike lanes and multi-use trails to facilitate walking and biking to nearby jobs, neighborhood services, and transit such as SamTrans routes 274 and 278 for Cañada College; 250, 260 and 294 for CSM; and 121, 123 and 140 for Skyline College.

Further TDM measures are presented below. Such measures are critical in supporting the Metropolitan Transportation Commission's Regional Transportation Plan/Sustainable Community Strategy, which identifies transportation system performance targets to increase non-auto mode share by 10 percentage points and decrease VMT per capita by 10 percent. Additionally, access management considerations should support a multi-modal transportation network.

- Project design to encourage walking, bicycling, and convenient transit access;
- On-site showers and bicycle racks to accommodate employees using modes of active transportation;
- Adoption of preferential carpool parking near the building entrance as an incentive for employees;
- An aggressive trip reduction target with Lead Agency monitoring and enforcement;
- Formation of a Transportation Management Association in partnership with other developments in the area;
- Employer subsidy contributions to promote the use of public transit; and
- Public-private partnerships or employer contributions to provide improved transit or shuttle service in the project area.

Lead Agency

As the Lead Agency, the SMCCCD is responsible for all project mitigation, including any needed improvements to State highways. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

Where mitigation is a condition of approval, the California Environmental Quality Act (CEQA) requires a Mitigation Monitoring and Reporting Program (MMRP). Required information is listed below. Further information on the MMRP is available on the following website:
http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa.html.

- Lead Agency contact name, address, and telephone number,
- Location, type and implementation schedule for each mitigation measure, and

- Signed and dated certification that the mitigation has been implemented, and all other reporting requirements have been adhered to, in accordance with Public Resources Code Sections 21081.6 and 21081.7.

Should you have any questions regarding this letter or require additional information, please contact Cole Iwamasa at (510) 286-5534 or by email at: cole.iwamasa@dot.ca.gov.

Sincerely,

PATRICIA MAURICE
District Branch Chief
Local Development - Intergovernmental Review

c: State Clearinghouse

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

bcc:PMaurice/CIwamasa/ChronFile/LHall/PCox

Response to Comment Letter 1 (Office of Planning Research)

Comment 1-1

The Office of Planning and Research (OPR) letter informs the District that the State Clearinghouse received the Draft EIR and submitted it to select agencies for review. The OPR letter includes as an attachment the Department of Transportation (Caltrans) comment letter on the Draft EIR.

Comment noted. This comment does not concern the adequacy of the EIR. No revisions to the Draft EIR are necessary.

The Caltrans comment letter is included herein as Comment Letter 2.

Letter 2

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 4
P.O. BOX 23660
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TTY 711
www.dot.ca.gov

Serious Drought.
Help save water!

October 12, 2015

SMVAR030
SON-VAR-VAR
SCH # 2015052007

Ms. Barbara Christensen
San Mateo County Community College District
3401 CSM Drive
San Mateo, CA 94402

San Mateo County Community College District 2015 Facilities Master Plan Amendment – Draft Environmental Impact Report

Dear Ms. Christensen:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the San Mateo County Community College District (SMCCCD) 2015 Facilities Master Plan Amendment. Caltrans' new mission, vision, and goals signal a modernization of our approach to California's transportation system, in which we seek to reduce statewide Vehicle Miles Traveled (VMT) and increase non-auto modes of active transportation. Our comments seek to promote the State's smart mobility goals and are based on the Draft Environmental Impact Report. Please reference the attached letter dated May 28, 2015 as those comments still apply. 2-1

Project Understanding

The SMCCCD 2015 Facilities Master Plan Amendment proposes numerous improvements for the Cañada, Skyline, and San Mateo College (CSM) campuses. These improvements include, but are not limited to the construction of a new health club on the Cañada College campus, a new residential complex on the Skyline Campus (71 units), parking expansion, roadway construction/reconfiguration, and building renovation on all three campuses. 2-2

Primary access to the Cañada College campus include Cañada Road, Woodhill Drive, and Farm Hill Boulevard. Interstate 280 (I-280) is located adjacent to Cañada College and can be accessed via I-280 ramps on Farm Hill Boulevard. Access to CSM is gained via West Hillsdale Boulevard, which then connects to adjacent State facility State Route (SR) 92/ J. Arthur Younger Freeway. Access to the Skyline campus is gained via College Drive, which then connects to SR 35/ Skyline Boulevard.

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Transportation Demand Management

Caltrans encourages you to enhance Transportation Demand Management (TDM), including improved transit and pedestrian/bike facilities to reduce regional VMT; thereby reducing traffic impacts on the State Highway System. The project should be conditioned to ensure connections to existing bike lanes and multi-use trails to facilitate walking and biking to nearby jobs, neighborhood services, and transit such as SamTrans routes 274 and 278 for Cañada College; 250, 260 and 294 for CSM; and 121, 123 and 140 for Skyline College. 2-3

Further TDM measures are presented below. Such measures are critical in supporting the Metropolitan Transportation Commission's Regional Transportation Plan/Sustainable Community Strategy, which identifies transportation system performance targets to increase non-auto mode share by 10 percentage points and decrease VMT per capita by 10 percent. Additionally, access management considerations should support a multi-modal transportation network.

- Project design to encourage walking, bicycling, and convenient transit access;
- On-site showers and bicycle racks to accommodate employees using modes of active transportation;
- Adoption of preferential carpool parking near the building entrance as an incentive for employees;
- An aggressive trip reduction target with Lead Agency monitoring and enforcement;
- Formation of a Transportation Management Association in partnership with other developments in the area;
- Employer subsidy contributions to promote the use of public transit; and
- Public-private partnerships or employer contributions to provide improved transit or shuttle service in the project area.

Lead Agency

As the Lead Agency, the SMCCCD is responsible for all project mitigation, including any needed improvements to State highways. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

Where mitigation is a condition of approval, the California Environmental Quality Act (CEQA) requires a Mitigation Monitoring and Reporting Program (MMRP). Required information is listed below. Further information on the MMRP is available on the following website: 2-4

http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa.html.

- Lead Agency contact name, address, and telephone number,
- Location, type and implementation schedule for each mitigation measure, and

- Signed and dated certification that the mitigation has been implemented, and all other reporting requirements have been adhered to, in accordance with Public Resources Code Sections 21081.6 and 21081.7.

2-4, cont.

Should you have any questions regarding this letter or require additional information, please contact Cole Iwamasa at (510) 286-5534 or by email at: cole.iwamasa@dot.ca.gov.

Sincerely,

PATRICIA MAURICE
District Branch Chief
Local Development - Intergovernmental Review

c: State Clearinghouse

Ms. Barbara Christensen,
San Mateo County Community College District
October 12, 2015
Page 4

bcc:PMaurice/CIwamasa/ChronFile/LHall/PCox

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
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FAX (510) 286-5559
TTY 711
http://www.dot.ca.gov/dist4/

Serious Drought. Help save water!

May 28, 2015

MSVar030
SCH# 2015052007

Ms. Barbara Christensen
San Mateo County Community College District
3401 CSM Drive
San Mateo, CA 94402

Dear Ms. Christensen:

San Mateo County Community College District 2015 Facilities Master Plan Amendment – Notice of Preparation

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above project. Caltrans' new mission, vision, and goals signal a modernization of our approach to California's transportation system; provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. The Local Development-Intergovernmental Review Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities of infill, conservation, and efficient development. We provide these comments consistent with the State's smart mobility goals that support a vibrant economy, and build communities, not sprawl. The following comments are based on the Notice of Preparation.

Project Understanding
The project identifies planned improvements at the San Mateo County Community College District's (District) three campuses. These improvements include but not limited to: building modernization and renovation, building demolition, new building construction, tree removal, landscaping/pedestrian improvements, and changes in the parking and roadways. The specific design and construction of campus projects would occur as projects are funded through the District's Capital Improvement Program.

Traffic Impact Fees
Please identify any Transportation Impact Fees associated with this proposed project. The scheduling and costs associated with planned improvements on the Caltrans right-of-way should be listed, in addition to identifying viable funding sources per General Plan Guidelines.

Traffic Impact Study and Multi-Modal Transportation
Please provide the following:

1. Mitigation for any roadway sections or intersections with increasing Vehicles Miles Travelled (VMT) need to be identified. Mitigation may include contribution to a regional fee program as applicable, and should support the use of transit and active transportation modes.

2. Impacts on pedestrians and bicyclists resulting from projected VMT increases need to be analyzed. The analysis should describe any pedestrian and bicycle mitigation measures and safety countermeasures needed to maintain and improve access to transit facilities and reduce vehicle trips.

3. Please consider pedestrian, bicycling, and transit performance or quality of service measures and modeling as a means of estimating the project impacts to these modes and evaluating mitigation measures and tradeoffs.

4. Include a Transportation Demand Management (TDM) Plan that will provide for appropriate documentation for monitoring TDM measures, including annual reports to demonstrate the ongoing reduction of vehicle trips while continuing to survey the travel pattern of employees and visitors.

Vehicle Trip Reduction
We encourage you to develop Travel Demand Management (TDM) policies to encourage usage of nearby public transit lines and reduce vehicle trips on the State Highway System. These policies could include lower parking ratios, car-sharing programs, preferential car/van pool parking, electric vehicle charging stations, bicycle parking and showers, shuttle services to transit, subsidized transit passes, and providing transit passes to students and employees.

For information about parking ratios, see the Metropolitan Transportation Commission (MTC) report *Reforming Parking Policies to Support Smart Growth* or visit the MTC parking webpage: http://www.mtc.ca.gov/planning/smart_growth/parking/.

In addition, secondary impacts on pedestrians and bicyclists resulting from any traffic impact mitigation measures should be analyzed. The analysis should describe any pedestrian and bicycle mitigation measures and safety countermeasures that would in turn be needed as a means of maintaining and improving access to transit facilities and reducing vehicle trips and traffic impacts on state highways.

Please provide at least one hard copy and one CD of the environmental document including technical appendices as soon as they are available.

Please feel free to call or email Sandra Finegan at (510) 622-1644 or sandra.finegan@dot.ca.gov with any questions regarding this letter.

Sincerely,

Patti

PATRICIA MAURICE
District Branch Chief
Local Development – Intergovernmental Review

cc: State Clearinghouse

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

bc: P Maurice, S Finegan, chron file

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Responses to Comment Letter 2 (Caltrans)

Comment 2-1

This comment summarizes Caltrans' mission, vision, and goals.

Comment noted. This comment does not concern the adequacy of the EIR. No revisions to the Draft EIR are necessary.

The District has reviewed the May 28, 2015 scoping letter from Caltrans. There were no substantive environmental issues raised that were not addressed in either the Draft EIR or in Caltrans' October 12, 2015 letter (and therefore addressed in responses to Comments 2-2 through 2-4).

Comment 2-2

This comment summarizes the Project and the primary access roads to each of the campuses.

Comment noted. This comment does not concern the adequacy of the EIR. No revisions to the Draft EIR are necessary.

Comment 2-3

This comment summarizes Caltrans' encouragement to enhance Transportation Demand Management (TDM), including transit and pedestrian/bicycle facilities, to reduce regional vehicle miles travelled (VMT). The comment lists several examples of TDM measures.

As described in Section 3.14, *Transportation and Traffic*, of the Draft EIR, the Project would neither facilitate or cause an increase in enrollment or employment, nor would it contribute to campus growth. Therefore, with the exception of Building 1, Kinesiology/Wellness, at Cañada College, and the residential complex at Skyline College, the Project would not result in the generation of new vehicle trips on the surrounding roadway network.

The new Building 1, Kinesiology/Wellness, at Cañada College would replace the existing Building 1, Gymnasium. The new Building 1 would have a health club that would be open to the public, while the existing Building 1 only supports classroom uses and is not open to the public. Operation of the new health club would generate new vehicle trips on surrounding local streets, but the local streets would continue to operate at acceptable levels of service (LOS D or better). Additionally, because the health club is expected to be mostly used by students, staff, and members from the surrounding neighborhoods, it is expected that only a few trips would be added to Interstate 280 (I-280). Additionally, as described under Impact CC-TRA-2, the health club is not anticipated to increase transit demand, and the Project does not include any substantial alterations to internal or external transportation facilities aside from improvements to internal pedestrian connections. Because the Project would not result in any traffic impacts on the local state highway system, TDM measures at Cañada College are not warranted. No revisions to the Draft EIR are necessary.

The residential complex at Skyline College would be a new use with up to 71 housing units on a vacant lot. As described under Impact SC-TRA-1, the new residential complex would generate new vehicle trips on College Drive and surrounding local trips. Skyline Boulevard (State Route 35) is located in the vicinity of Skyline College. As described, the residential complex would add a maximum of 54 peak-hour trips to Skyline Boulevard, and the new trips would not cause the Skyline

Boulevard/College Drive intersection to exceed the San Bruno LOS service. Additionally, as described under Impact SC-TRA-2, the residential complex is not anticipated to increase transit demand to a level at which it could not be accommodated by existing transit service. The Project does not include any alterations to internal or external transportation facilities aside from improvements to internal pedestrian connections. Because the Project would not result in any traffic impacts on the local or the state highway system, TDM measures at Skyline College are not warranted. No revisions to the Draft EIR are necessary.

Comment 2-4

The comment states that the District is responsible for all Project mitigation, including any needed improvements to state highways, and that the mitigation should specify the Project's fair share contribution, financing, scheduling, and implementation and monitoring responsibilities. The comment also states that this information should be presented in the Mitigation Monitoring and Reporting Program (MMRP), and includes information required to be in the MMRP.

Before the Project is approved, a MMRP will be adopted that lists the District-adopted mitigation measures, time for implementation, and parties responsible for their implementation and monitoring. Mitigation measures must be fully enforceable through permit conditions, agreements, or other measures. The District is responsible through the MMRP for ensuring that implementation of the mitigation measures occurs. Because the Project is not anticipated to make a considerable contribution to traffic on state highways, there is no justification for a fair share contribution to highway improvements.

Letter 3

Community Development Department

Planning and Housing Division
1017 Middlefield Road
Redwood City, CA 94063

(650) 780-7234
planning@redwoodcity.org
www.redwoodcity.org

PLAN REVIEW COMMITTEE

October 15, 2015

San Mateo Community College District
Barbara Christensen, Director of Community/Government Relations
3401 CSM Drive
San Mateo, CA 94402

SUBJECT: DEIR COMMENTS
PROJECT #: 2015 FACILITIES MASTER PLAN AMENDMENT
PROPERTY ADDRESS: 4200 FARM HILL BLVD.
ASSESSOR'S PARCEL NUMBER(S): [068-320-410, 400, 330], 068-330-330

Dear Ms. Christensen:

Thank you for the opportunity to comment on the DEIR for the San Mateo Community College 2015 Facilities Master Plan, received August 31, 2015. The City reviewed the portion of the DEIR relating to proposed improvements at Canada College with the Plan Review Committee (PRC) on September 10, 2015 to identify macro issues that may impact the feasibility of the project. This letter summarizes input from the PRC.

1. **Planning**:
   Please provide a courtesy copy to the City once the DSA approves the project. 3-1

2. **Engineering Division**:
   a. 3.8.3.3 page 3.8-26 – 2nd paragraph and other portions of the report state all "campus area" flows will continue to flow to Redwood Creek, but previously 3.8.2.1 states that it flows to two watersheds, South Bay (Redwood Creek) and Santa Clara. Figure ES-1 and 3.8-1a when looked at together indicate that the actual project site will flow to the Santa Clara watershed. Needs clarification. 3-2
   b. 3.8.3.3 page 3.8-27 – The report states that storm drain systems will flow to the City of Redwood City's storm drainage system. Impact CC-HYD-1 and thus Mitigation Measure CC-HYD-2 are cited throughout the section as the means of controlling the rate of runoff leaving the site. In order to control 3-3

runoff prior to entering the Redwood City storm system, this mitigation measure would need incorporate that "the project and its hydromodification measures will be designed in accordance with the Redwood City Drainage Guidelines for Commercial Development, which requires that the 30-year post-development discharge must be equal or less than the 10-year pre-development discharge." 3-3, cont.

c. 3.8.3.3 page 3.8-30 – Impact CC-HYD-4 relies on Impact CC-HYD-1's description to indicate runoff has been controlled. Directing to new (or existing) landscaped area does not control runoff unless that landscaped area is designed as a detention system to accommodate the additional flows from the newly created impervious areas. 3-4

d. 3.12.2.1 page 3.12-5 – Wastewater – SBSA is now SVCW 3-5

e. 3.12.3.3 page 3.12-13 – Impact CC-PSU-3, 2nd paragraph. Usage by Redwood City water customers is calculated by Attachment Q of the Design Criteria in the City's Engineering Standards. This calculation will indicate that water usage will increase. Health clubs (the wellness center) will be open to the public and therefore the number of users will increase and will use additional water. The second to last sentence of this 2nd paragraph should instead indicate that water use will increase. As a Redwood City water customer, in order to offset this increase, the project shall pay all applicable water meter and water capacity fees based on existing and proposed water meter sizes, and existing and proposed water usage in gallons per day. Although mentioned in this section, current drought conservation efforts are not indicators of future conservation efforts and cannot offset planned increases in water usage 3-6

f. 3.12.3.3 page 3.12-13 – Impact CC-PSU-4, the 3rd to last sentence should address the comments on the Water system above, because increase in indoor water use will create increase in wastewater generation. Usage by Redwood City water customers is calculated by Attachment L of the Design Criteria in the City's Engineering Standards. This calculation will indicate that wastewater generation will increase. If the Redwood City sewer system provides service here, in order to offset this increase, the project shall pay all applicable sewer capital facilities and wastewater treatment capacity fees based on the existing and proposed wastewater generation in gallons per day. 3-7

g. 3.12.3.3 page 3.12-14 – Impact CC-PSU-5, 3rd paragraph needs to indicate that stormwater runoff rates will be controlled in accordance with local standards as well. 3-8

3. **Fire Division**:
Redwood City Fire Department does not have any jurisdiction for fire and life safety for the projects slated for the campus. The Woodside Fire Protection District and the State of California DSA Office has the primary responsibility. Fire does not have any further comment. 3-9

4. **Building Division**:
All school buildings must go through the DSA plan review too. Building does not have any further comment. 3-10

5. **Police Division**:
   Farm Hill Blvd. is not a truck route. Consider using the 280 corridor as the primary truck route for construction vehicles. 3-11

Sincerely,

Lindy Chan

Lindy Chan
Senior Planner

Cc:
Enclosed:

Responses to Comment Letter 3 (City of Redwood City)

Comment 3-1

The City of Redwood City (City) requests a copy of the Final EIR upon Project approval.

The District will provide a copy of the Final EIR upon approval of the Project. This comment does not concern the adequacy of the EIR. No revisions to the Draft EIR are necessary.

Comment 3-2

The City requests clarification regarding to which watershed stormwater from Cañada College flows.

The Redwood Creek watershed is a subwatershed of the larger South San Francisco Bay (South Bay) Watershed. Although Cañada College campus is located within both the larger South Bay and Santa Clara watershed boundaries, all onsite drainage is routed to the Redwood City municipal storm drain system, which ultimately flows to the South Bay watershed via Redwood Creek subwatershed. A few outfalls that discharge to the south first discharge runoff into the town of Woodside, which routes all its stormwater to the Redwood City storm drainage system as well. This information was obtained from the District Facilities Planning, Maintenance & Operations Stormwater management Program document (SMCCD 2013). This information was described on page 3.8-13 of the Draft EIR in the Surface Hydrology section. The text was modified on page 3.8-26 to clarify that the stormwater is routed to the Redwood City storm drainage system, which flows through the Redwood Creek subwatershed of the larger South Bay Watershed (refer to Chapter 3, *Text Revisions to the Draft EIR)*.

Comment 3-3

The City requests that additional information be added to Mitigation Measure CC-HYD-2 to specify that the Project and its hydromodification measures will be designed in accordance with Redwood City Drainage Guidelines for Commercial Development.

As described in Chapter 2, *Project Description,* the Project would have a net zero increase in runoff and a grading and drainage plan would be prepared for improvements involving new building construction, new impermeable surfaces, or re-grading. The Project would comply with the District's Storm Water Management Program, which is aligned with current State Water Board's Phase II Small MS4 Permit requirements. Therefore, the District is not required to comply with local jurisdictions' regulations. The hydromodification features included in Mitigation Measure CC-HYD-2 are consistent with the State Water Board's standards. No revisions to the Draft EIR are necessary.

Comment 3-4

The City indicated that directing runoff to new or existing landscaped areas does not control runoff unless that landscaped area is designed as a detention system to accommodate additional flows.

As described under Impact CC-HYD-4, the District will be required to comply with Mitigation Measure CC-HYD-2. This mitigation includes the design and maintenance of hydromodification features to treat runoff. The measure also requires soils to percolate at a rate of 5 to 10 inches per

hour. Furthermore, as described in Chapter 2, *Project Description,* the Project would have a net zero increase in runoff.

Detention is not the only way to control runoff. Runoff can be controlled by retaining or infiltrating runoff in addition to detaining it (via detention system) and matching post-project flows and durations to pre-project patterns. The new landscaped areas and hydromodification features located throughout the campus would be designed to allow for infiltration of additional runoff from the project that would otherwise flow into the storm drain system, which would ultimately serve the same purpose as a detention system by matching postproject flows to preproject flows. Text in Mitigation Measure CC-HYD-2 (page 3.8-27) was modified to provide clarification (refer to Chapter 3, *Text Revisions to the Draft EIR)*.

Comment 3-5

The City states that wastewater is treated at Silicon Valley Clean Water.

The description of wastewater treatment services for the City of Redwood City has been revised in Section 3.12.2.1 of the Draft EIR to indicate that sewage is treated at Silicon Valley Clean Water (SVCW) (refer to Chapter 3, *Text Revisions to the Draft EIR*).

Comment 3-6

The City states that, because it would be open for public use, the health club at Cañada College would result in an increase in water use. The City notes that the District should pay all applicable water meter and water capacity fees based on existing and proposed water meter sizes and water usage. The City requests that the impact analysis under Impact CC-PSU-3 be revised to state that water use will increase.

As stated in the second paragraph under Impact CC-PSU-3, the District acknowledges that the new buildings constructed at Cañada College, including the health and wellness center could result in increased water use. The District is committed to the wise and responsible use of resources including water conservation. A number of programs and practices are in place to mitigate potentially significant increases in water usage including sustainable building design, construction standards, sustainability action plans, and a water efficiency program. Infrastructure improvements and water meter adjustments will not be required. The second to last sentence in the impact analysis states that "the Project would not result in the need for additional water supply *significantly* [emphasis added] over existing demand." As an existing customer, the District currently pays, and will continue to pay, all appropriate water meter, water capacity, and water usage fees based on the District's water meter sizes and water usage in gallons per day. Furthermore, the District would use a stormwater runoff collection system to capture rainwater for use in toilets, urinals, and for irrigation. This is anticipated to reduce water usage by approximately 30 percent. Including the 30 percent reduction from recycled rainwater, the total water usage for Building 1, Kinesiology/Wellness, would be approximately 3.92 million gallons per year (mg/y). This is based on an estimate of 1,750 people using the facility per day[1] and includes approximately 3.25 mg/y of water associated with operation of the building, 0.40 mg/y of water associated with irrigation, and the 0.27 mg/y of water associated with the two new pools described under Impact CC-PSU-3 in the Draft EIR. The total water consumption would not require any changes to the existing 4-inch

[1] The estimate of 1,750 people using the facility per day is derived from the current usage of the existing CSM health club facility.

domestic water pipe serving Building 1 and would not change the size of the domestic water meter serving the campus. Additionally, the existing 6-inch fire service pipe would not require upsizing. [2]

Comment 3-7

The City states that because the Project would result in an increase in water supply, it would also result in an increase in wastewater generation. The City notes that the District should pay all applicable sewer capital facilities and wastewater treatment fees based on wastewater generation in gallons per day. The City requests that the impact analysis under Impact CC-PSU-4 be revised to state that wastewater generation will increase.

As stated in the second paragraph under Impact CC-PSU-4, the District acknowledges that the new buildings constructed at Cañada College could result in increased wastewater generation. The third to last sentence in the impact analysis states that "the Project would not result in the additional generation of wastewater *significantly* [emphasis added] over existing demand." As an existing customer, the District currently pays, and will continue to pay, all applicable sewer capital facilities and wastewater treatment fees based on wastewater generation in gallons per day. See also Response to Comment 3-6.

Comment 3-8

The City requests that a statement be added to Impact CC-PSU-5 that stormwater runoff rates will be controlled in accordance with local standards.

As described in Chapter 2, *Project Description,* the Project would have a net zero increase in runoff and a grading and drainage plan would be prepared for improvements involving new building construction, new impermeable surfaces, or re-grading. The Project would comply with the District's Storm Water Management Program, which is aligned with current State Water Board's Phase II Small MS4 Permit requirements. Therefore, the District is not required to comply with local jurisdictions' stormwater regulations. No revisions to the Draft EIR are necessary.

Comment 3-9

The City notes that the Redwood City Fire Department does not have any jurisdiction over the campus.

The setting description under Fire Protection Services in Section 3.12.2.2 has been revised to remove reference to the Redwood City Fire Department (refer to Chapter 3, *Text Revisions to the Draft EIR*).

Comment 3-10

The City notes that all school buildings must go through the DSA Plan review.

Comment noted. This comment does not concern the adequacy of the EIR. No revisions to the Draft EIR are necessary.

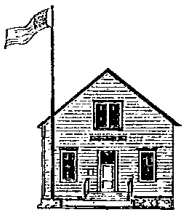
[2] Whitmore, Brian P. BCA Architects. November 5, 2015—E-mail to Chris Strugar-Fritsch and Barbara Christensen, San Mateo County Community College District.

Comment 3-11

The City states that Farm Hill Boulevard is not a truck route and that I-280 should be used as the primary truck route for construction vehicles.

As stated on page 2-17 of Chapter 2, *Project Description*, construction vehicles would use Farm Hill Boulevard as an entrance to the campus for materials deliveries. There is no direct access into the campus from I-280.

Letter 4



The Town of
Woodside

October 15, 2015

Barbara Christensen, Director of Community/Government Relations
San Mateo County Community College District
3401 CSM Drive
San Mateo, CA 94402

RE: DRAFT EIR FOR THE SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT 2015 FACILITIES MASTER PLAN AMENDMENT

Dear Barbara:

Thank you for providing the Town of Woodside the opportunity to comment on the Draft EIR for the 2015 Facilities Master Plan Amendment. Below are my comments regarding the Draft EIR.

Mitigation Measure CC-AES-2 seeks to limit the visual impacts associated with the new Building 1 (Kinesiology/Wellness) which will be visible, most notably, from I-280 and Barkley Fields and Park. The mitigation states that the buildings "will be designed in a manner that allows these features to blend with the surrounding built and natural environments so that these structures complement the visual landscape." This mitigation measure would establish a subjective solution without a clear way for the public to determine if the architectural choices made will achieve the objective of the measure. As additional design is done on Building 1, I would strongly encourage the College District to engage directly with the Town of Woodside on these important architectural decisions. A presentation and discussion with the Town Council would be an effective way to ensure that the mitigation measure will meet its objectives. 4-1

In the lighting impact analysis for Building 1 (Kinesiology/Wellness), there is discussion and a mitigation measure which addresses the reflective properties of the windows. However, there is no discussion or analysis about the impact of the interior lighting of Building 1 which would be visible at night through the windows. 4-2

On page 3.10-2, the construction hours that are included in the Woodside Municipal Code are incorrectly stated. Construction is allowed from 8:00 am to 1:00 pm on Saturdays, with no hours on Sundays. Additionally, in the review of the local regulatory setting for noise, there is a brief mention of the Town of Woodside General Plan Noise Element, concluding that it "does not have guidelines that are specifically relevant to the project." In fact, the Noise Element does contain standards for maximum noise levels (page 231) and states the best management practices that are applicable in Woodside for controlling construction noise (pages 232 and 233). 4-3

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townhall@woodsidetown.org

Mitigation Measure CC-NOI-1 provides for the College District requiring the contractor to employ noise-reducing construction practices "if construction work must be conducted between the hours of 6:00 p.m. and 7:00 a.m. weekdays, 5:00 p.m. and 9:00 a.m. on Saturdays, or at any time on Sundays." Furthermore, the impact analysis states that the District uses County noise standards and the County construction hours. An appropriate mitigation would be to use the construction hour standards adopted by the local communities – in this case Woodside and Redwood City. The properties adjacent to Cañada College must abide by these limitations and have an expectation that construction noise outside of those hour would not occur at all. 4-4

If you have any questions about these comments, please feel free to contact me at (650) 851-6790 or kbryant@woodsidetown.org.

Sincerely,

Kevin Bryant
Town Manager

Responses to Comment Letter 4 (Town of Woodside)

Comment 4-1

The Town of Woodside (Town) states that Mitigation Measure CC-AES-2 is a subjective solution for ensuring Building 1, Kinesiology/Wellness, is designed to blend with the surrounding built and natural environment. The Town recommends that the District engage with the Town of Woodside regarding the architectural decisions and present and discuss with the Town Council the mitigation measures.

Compared with the taller, stark white existing building, the new Building 1 would be lower in height and darker in color so that it would blend and recede better within the landscape, as illustrated by the simulations shown in Figures 3.1-2 through 3.1-5. The District will meet with the Town of Woodside Manager regarding the architecture of Building 1 and Mitigation Measure CC-AES-2 has been revised to include this.

Comment 4-2

The Town states that there is no discussion or analysis of the impact of the interior lighting from Building 1 which would be visible at night through the windows.

Currently, the Draft EIR describes the existing sources of light, which include interior building light associated with the existing Building 1, and then describes the lighting that would be new. Building 1, Kinesiology/Wellness, would replace an existing building with windows and interior lighting. Although the new Building 1 would be larger than the existing Building 1, it would not be as tall. The new Building 1 would have more windows than the existing Building 1, but as illustrated by the simulation in Figure 3.1-5, the interior lighting would not appear to be as bright as the existing white building. In the evening, the dominant source of light emanating from Building 1 would be the exterior lighting associated with the new swimming pools. Any interior lighting from Building 1 would be minimal compared with the pool lighting. However, the pool lighting would also be downcast to minimize the amount of light spill and would be extinguished daily by 11:00 p.m. The Draft EIR has been revised to better clarify these characterizations and Mitigation Measure CC-AES-3 has been refined to specify measures to reduce visible interior lighting (refer to Chapter 3, *Text Revisions to the Draft EIR*).

Comment 4-3

The Town states that the construction hours are listed incorrectly in Section 3.10, Noise, that the Town of Woodside General Plan Noise Element includes standards for maximum noise levels, and that the plan also states best management practices that are applicable in Woodside for controlling construction noise.

The construction hours for the Town of Woodside listed in Section 3.10.1.3 have been corrected. Additionally, the applicable guidelines from Town of Woodside General Plan Noise Element have been added to the regulatory setting in Section 3.10.1.3 (refer to Chapter 3, *Text Revisions to the Draft EIR*).

Comment 4-4

The Town states that the impact analysis indicates the District uses County noise standards and County construction hours. The Town asserts that the District should comply with the construction standards adopted by the local communities (Woodside and Redwood City).

As described on page 3.10-17 of the Draft EIR, construction activity within the campus boundaries is not subject to City or County zoning policies. The District used County noise standards to assess potential noise impacts, but is not implementing the County's construction noise hours. As described, there is potential that construction activities would occur outside of the County's limits on construction hours. The measures listed under Mitigation Measure CC-NOI-1 are included in the Draft EIR as a courtesy to reduce noise as much as feasible.

Letter 5

Subject: Comments- Draft Environmental Impact Report, 2015 Facilities Master Plan

From: Gladwyn D'Souza <godsouza@mac.com>
Date: October 13, 2015 at 9:58:13 PM PDT
To: <christensen@smccd.edu>
Subject: Comments- Draft Environmental Impact Report, 2015 Facilities Master Plan

10/13/15
Thank you for the opportunity to comment on the Draft Environmental Report for the 2015 Facilities Master Plan (DEIR 2015FMP) http://smccd.edu/eir/files/SMCCCD_DEIR_CD_Web.pdf

Alternatives:
There should have been an alternative on meeting the buildout goal of the Facilities Master Plan by including it on the developed footprint. Currently in reviewing the maps of the the three campuses almost half of the developed footprint is related to parking. An alternative would have looked at reducing the parking footprint by increasing parking prices especially near the buildings. Putting solar panels on top of these degraded landscapes doesn't green their outcome. Many economic studies say pricing is the best way to encourage changes in behavior that will have a positive impact on the health of sensitive receptors of concern in the DEIR 2015FPM. Many options exist to implement the system such as the Fastrak system utilized at SF Airport parking, and the system Mike Bullock submitted for review when the prior version of this plan was challenged in court. Other benefits of building on degraded landscapes include being able to preserve historic resources, reducing impact on undisturbed landscapes, improving hydrology especially critical at the top of a watershed, and aiding functioning options to the single occupant vehicle commutes to the facilities such as bus, carpool, etc. because of the cost of parking. The DEIR should look at an alternative to reduce the built environmental footprint of the facilities and safeguard the existing biodiversity and hydrology of the site. 5-1

Another alternative would have reviewed the need for expansion at the current locations. The facilities are based in the most alternative transit hostile location on The Peninsula. Adding additional buildings does not improve the likelihood of a greener commute. Any attempt at greening the campus will be more than offset by the operations emission of the forced commute. The Community College District should have taken a page from other colleges that are siting small versions of their campuses in downtown locations. Taking over a building in downtown San Mateo or Belmont would provide educational opportunities on the transit corridor with all the associated amenities including housing that students and teachers look for and for which they won't need to drive. Much of the emission problems identified in the DEIR 215FMP are related to the hilly locations where internal combustion engines especially when cold are inefficient and toxic. Downtown placement would also be an offset for emissions from the operations of the existing facilities especially recreation. Buildings, such as contemplated, for innovation and emerging technology, would especially be suited to locations where services are abundantly available. The DEIR should look at an alternative that is convenient to the transit corridor for locating new facilities. 5-2

Buildings:

1

Please look at bird friendly buildings such as the standards implemented in San Francisco http://sf-planning.org/index.aspx?page=2506 to reduce the staggering bird fatality rates from the window layout and transparency in locales that feature views as a primary design criteria. Many practical features exist to reduce or eliminate the unnecessary fatality rate of birds, and the San Francisco standards are an excellent place to start. The DEIR should account for the bird fatalities in current building designs and build in mitigation. 5-3

Landscapes:
Much of the campuses today feature acres of green grass- a liability in the current drought and a seeming deaf year to the legislative intent in California on water conservation. The DEIR 2015FMP should look at urban food landscapes that have pollinator friendly features and use water collected in swales over the rainy season based on the commitment "to net zero increase in stormwater runoff and systems designed to effectively manage quantity of stormwater flows while protecting local stream water quality." The Governor's program against lawns is called Brown is the New Green. Besides setting a bad example of what people should desire in their landscapes the present facilities don't show the colleges taking part in the existential challenge facing the state. In addition the state has put a number of measures in place to improve access to health food such as AB 551 (a mini Williamson Act for small urban parcels), compost diversion awareness (HR59), Nutrition access (AB 2385), and expanded access to nutrition (AB 1321). Urban food landscapes are already part of campuses such as UC Santa Cruz. They would help the 2015FMP reduce it's food footprint and improve access to nutritious food. The DEIR should account for the drought and the image the SMC colleges wish to provide to accommodate critical policy recommendations. 5-4

Transportation:
The state has chosen not to base traffic studies for CEQA analysis on Level Of Service measurement anymore. The most recent guidelines call for analysis of Vehicle Miles Travelled. http://www.planetizen.com/node/70714 The DEIR 2015FMP says on 3.14-1 that it will rely on Level of Service as the threshold of significance. This creates both a disconnect with present policy for AB32 and SB375 and allows the DEIR to not analyse the operations emissions from commuters that will result when the plan is at buildout. The DEIR should be corrected to at least reflect the latest state policy. 5-5

Residential Complex:
The DEIR 2015FMP should look at townhomes instead of single family homes to increase the green space per resident and preserve more of the site. Single Family Homes are the most inefficient use of land characteristic of sprawl with immense negative environmental consequences relevant to CEQA. Preserving more of the site allows for bio diversity and water retention on site. 5-6

Biodiversity:
Much of the mitigation proposed in the DEIR 2015FMP have not improved the survival rate of the species mentioned over the last fifty years. None of these measures have helped the target species increase- generally these species have declined despite the mitigations. The DEIR needs to say how these measures will help and outline real mitigations that can help species survive and improve their habitat. 5-7

Regards,
Gladwyn d'Souza
1473 Sixth Ave, Belmont, CA 94002
650-804-8225

2

Responses to Comment Letter 5 (Gladwyn d'Souza)

Comment 5-1

The commenter suggests an alternative to meet the buildout goal of the Master Plan and reducing the parking footprint.

The proposed 2015 Facilities Master Plan Amendment will not increase current enrollment or parking requirements. Reducing the parking footprint is not related to any of the Project's potential significant impacts and would simply shift the Project's impacts from one portion of the campus to another. It would not substantially reduce any of the Project's significant impacts. Therefore, this alternative, as proposed by the commenter, is not considered further. No revisions to the Draft EIR are necessary.

Comment 5-2

The commenter suggest an offsite alternative for new campus facilities.

The Project is the modernization of the existing campuses. Offsite locations and satellite facilities, by definition, do not meet the objectives of the Project. The alternative proposed by the commenter would not result in modernization of the existing campuses. Therefore, this alternative, as proposed by the commenter, is not considered further. No revisions to the Draft EIR are necessary.

Comment 5-3

The commenter requests that the Draft EIR account for bird fatalities and incorporate mitigation for bird fatalities.

Bird fatality is not an identified impact of the Project. There is no evidence that the existing campus buildings or the modernization of the campuses would result in an unusual or high number of bird fatalities. No revisions to the Draft EIR are necessary.

Comment 5-4

The comment suggests that the Draft EIR should account for the current drought and consider urban food landscapes and nutrition access.

As described on page 2-15 of the Draft EIR, new buildings on the college campuses, with the exception of the Residential Complex at Skyline College, would target LEED Gold certification, and all new and modernization and renovation as part of the Project would aim to exceed the California Building Code Title 24 2013 Energy Efficiency Standards by at least 15%. Section 2.4.5 of the Draft EIR lists several sustainability strategies including a commitment to net zero increase in stormwater runoff and systems designed to effectively manage quantity of stormwater flows. Further, the District Board of Trustees has established sustainability goals, and each campus has a sustainability plan, which includes the college's visions, goals, and objectives for sustainability, as well as strategies to meet these goals. The proposed facility improvements at each of the campuses would be consistent with the visions, goals, and objectives in the respective sustainability plans.

Nutrition access and urban food landscapes are not related to the potential impacts of the Project and, as a result, do not require mitigation. No revisions to the Draft EIR are necessary.

Comment 5-5

The commenter states that the state guidelines stipulate that traffic studies should be based on VMT rather than LOS and that the EIR's LOS analysis creates a disconnect with Assembly Bill 32 and Senate Bill (SB) 375 and allows the EIR to not analyze operations emissions from commuters at buildout.

The commenter is misinformed. No change has been made to the State CEQA Guidelines that would require consideration of VMT in place of LOS as the traffic metric for impact analysis. The new traffic impact guidelines are still under development. The California Office of Planning and Research is expected to release the second version of its discussion draft later this fall; the proposed VMT Guidelines will then go to the Natural Resources Agency for the agency to shepherd them through the administrative rulemaking process. The process of officially adopting Guidelines amendments typically takes a year to complete. The new VMT Guidelines will likely become effective in late 2016.

There is no disconnect with Assembly Bill 32 (which mandates a reduction in statewide greenhouse gas emissions to 1990 levels by 2020) or with SB 375 (which mandates the inclusion of a "sustainable communities strategy" in the Regional Transportation Plan that will reduce regional greenhouse gas emissions). Neither AB 32 nor Plan Bay Area, the applicable Regional Transportation Plan, require or are dependent upon using VMT as the traffic metric for CEQA analysis. No revisions to the Draft EIR are necessary.

Comment 5-6

The commenter suggests that the EIR consider townhomes rather than single-family homes.

As described in Chapter 2, *Project Description*, the residential complex at Skyline College would include attached residences as well as single-family detached residences. The site is currently designated for low density residential development (2.1-8.0 dwelling units per acre). The District proposes to amend the San Bruno General Plan and/or to seek a planned development permit to re-designate a portion of the site as Medium Density Residential (8.1–24.0 dwelling units/acre). This designation was chosen in order to allow multi-family residences. Additionally, the residential site is an infill site that is adjoined by existing development in the form of single-family residences and the college campus. No revisions to the Draft EIR are necessary.

Comment 5-7

The comment requests that the EIR explain how the mitigation measures will improve the survival rate of impacted species.

The EIR contains mitigation measures to minimize impacts on special-status plant species (Mitigation Measure CC-BIO-1, CSM-BIO-1, SC-BIO-1), white-tailed kite and other next birds (Mitigation Measure CC-BIO-2, CSM-BIO-2, SC-BIO-2), fringed myotis, pallid bat, and hoary bat (CC-BIO-3, CSM-BIO-3, SC-BIO-3), and Mission blue butterfly (SC-BIO-4a through SC-BIO-4c). These mitigation measures are industry standard and have been effective in reducing impacts on special-status species. These mitigation measures reduce the Project's impacts on special-status species to less than significant levels. No revisions to the Draft EIR are necessary.

Letter 6

Barbara Christensen
Director of Community/Government Relations
San Mateo County Community College District
3401 CSM Drive
San Mateo, CA, 94402

October 9, 2015

Dear Ms. Christensen,

I am writing in response for your invitation for public comment on the DEIR for the SMCCD 2015 Master Plan Amendment. I am an employee of SMCCD, biology instructor. I also serve on a number of committees on the campus including the Sustainability Committee, the Basic Skills Initiative Committee and the Safety Committee. Public participation is at the heart of CEQA and I welcome this opportunity to comment as an interested person and resident of San Mateo County, on the capital improvements for the College of San Mateo (CSM) Campus.

I want to address some specific issues regarding the environmental impact analysis of the Master Plan on the CSM campus.

The Master Plan Amendment shows two items in the project description:

1. Demolition and replacement of Buildings 12 and 19, and construction of a new Building 19, the Center for Innovation and Emerging Technologies (New Center).

2. The Master Plan shows the Building 20, Building 20, Greenhouses and CSM Gardens, as is, with no renovations or projects planned. The current Amendment does not show a parking lot, which has been part of the District's plans for that space, and was excluded because of the litigation (Board Meeting, April 14, 2015). 6-1

The DEIR states: There would be no changes to Buildings 20, Horticulture, 20A, Greenhouse, or Edison Lot 7. The current document is not specific about the hill areas immediately adjacent to the New Center.

I would like to advocate for an evaluation of how preservation and enhancement of this area could benefit the current construction program and be a living laboratory adjacent to the new Center for Innovation and Emerging Technologies. The current map of the campus does not show exactly how the new building will be constructed, and what type of disturbance, and therefore, impacts would occur immediately adjacent to the New Center.

1. This is part of the old campus (including the hills), and after the construction proposed in the current master plan, there will be no part of the old campus that is preserved as it once was. There are also plaque trees and two honorary garden sections here, and these resources acknowledge part of the history of the campus. 6-2

2. I would like to introduce the idea of possible mitigation for construction of the new facilities. I think that now that all of the other parking lots are renovated that there are new opportunities for innovation on this site. The area is currently abandoned and in poor condition now. But, the

1

area is still used for science and other classes. Live specimens remain that are used for botanical and instructional purposes.

3. I also believe it is a quiet area of more natural scenery compared to the rest of the campus. It is an aesthetic resource and eventual removal, whatever the plan is, it would be potentially significant impact. I see students enjoying this area all the time, even in the garden's poor condition. I hear from students about the desire for a more natural place to go and "distress."

4. Why not turn this into a net benefit for the students and the campus? It is a greenspace with enormous potential benefit for aesthetics, instruction, community outreach and involvement. Sustainability is a big part of what we do on campus. Building over a greenspace is not a sustainable practice. What about a sustainability demonstration center? What about re-classifying the building for non-instructional use and renting it out for emerging sustainable enterprises? Why not have a demonstration garden on drought-resistant gardens, ethnobotany, and healthy edibles? There would be enough interest I think among the student body and faculty for a volunteer-community partnership to enhance and manage this area. It could serve as a showpiece for 21st Century sustainable living, adjacent and complementary to the new building.

5. The hills surrounding the garden are valuable instructional and botanical resources, with mature trees, and mature understory plants (bryophytes and fungal organisms). These resources should be preserved for future students. I believe it is possible to work around these areas during construction. If construction will impact these "hills" then this should be evaluated for its aesthetic and biological values.

6-2, cont.

I offer these comments with the most heartfelt and sincere desire to see the college thrive and set an example to the community on sustainable practices

Sincerely,



Linton Y. Bowie

2

Responses to Comment Letter 6 (Linton Y. Bowie)

Comment 6-1

The commenter describes that the Project includes the demolition and replacement of Buildings 12 and 19 and the construction of a new Building 19 in their place on at College of San Mateo (CSM). The commenter also quotes the Draft EIR that there would be no changes to Buildings 20, Horticulture, 20A, Greenhouse, or Edison Lot 7. The EIR does not include any plans for the hills immediately adjacent to the New Building 19.

The commenter is correct in the summary of the proposed changes regarding Buildings 12 and 19. The Project evaluated in the Draft EIR does not include any changes to Buildings 20, 20A, or the Edison Lots. No revisions to the Draft EIR are necessary.

Comment 6-2

The commenter is proposing alternatives to be considered for the hilly area adjacent to the new Building 19.

The Project as proposed does not include any changes to Buildings 20, Horticulture, 20A, Greenhouse, Edison Lot 7, or to the surrounding hillsides and, therefore, there are no impacts associated with development of this area that should be discussed in the EIR. Alternatives related to Building 20 and its environs are outside of the scope of this EIR and are not being considered as part of the project being analyzed. Therefore, a discussion of alternatives related to Building 20 and its environs is unnecessary because it does not relate to the Project.

Letter 7

Barbara Christensen
Director of Community and Government Relations
San Mateo Community College District
3401 CSM Drive
San Mateo, CA 94402
October 10, 2015

Dear Ms. Christensen,

We, the members of the new CSM club, The Conservation Society, are writing in response to Item E, no. 4, "Scoping Comments," in the *Appendices to the Draft Environmental Impact Report (DEIR) for 2015, Facilities Master Plan Amendment.*

As a new club, we hope to make our presence on campus a way for CSM students now and in the future to engage in activities aimed at preserving the health, beauty, and educational opportunities related to the natural environment of the campus and the county of San Mateo.

We have many projects for the campus and wider community, including beach clean-ups and carpooling education for CSM students, and projects to raise money for enhanced recycling practices on campus.

Among our interests is the preservation and restoration of the CSM Garden, located near the existing greenhouses and Building 20.

We do not find in the *Draft Environmental Impact Report for 2015, Facilities Master Plan Amendment*, nor in the *Appendices*, any mention of the plans for this area of campus. This is what the current document says: There would be no changes to Buildings 20, Horticulture, 20A, Greenhouse, or Edison Lot 7. So, in response to the abovementioned "Scoping Comments," we would like to meet with District staff to discuss the scope and content of the EIR's environmental information as it regards the CSM Garden.

We have generated the following reasons for our interest in the fate of what we feel is a precious bit of CSM:

7-1

Its aesthetic and recreational uses for the campus
It is the only park-like area on campus
It is a natural outdoor place; other places are landscape
It is a place for health and student success because of its views of natural and peaceful scenery
It provides flowers and plants used for class purposes
Many classes make field trips to the area

We think this area can be restored as an aesthetic, healthful, living laboratory for the campus and adjacent to the Center for Innovation and Emerging Technologies

The area has local importance for wildlife, a variety of habitats
Enough people would participate with the college to help maintain it and restore it
There could be special planting beds for various kinds of educational purposes
It could be a demonstration of sustainable farming or gardening
It could be used to demonstrate drought resistant plantings
It could be used to demonstrate an edible garden
It could be used to demonstrate the benefit of plants and how they remove carbon dioxide from the atmosphere
It might be used to explore innovative water use, such as a cistern, or gray water reuse.

We are grateful for your time and attention to this matter, and hope to hear from you at your earliest convenience regarding where the Garden fits into the Master Plan. 7-1, cont.

Sincerely,

The Conservation Society
Erika Fabre, President

Response to Comment Letter 7 (Erika Fabre, The Conservation Society)

Comment 7-1

The commenter states that The Conservation Society has an interest in preserving and restoring the CSM Garden and requests that preservation of the CSM Garden be included in the scope of the EIR.

The Notice of Preparation (NOP) for the Draft EIR was published on May 5, 2015. The purpose of the NOP was to solicit participation from relevant agencies and from the public in determining the scope of the EIR. The scoping period ended on June 8, 2015. The District did not receive a scoping comment from the commenter. The CSM Garden is not part of the Project analyzed in this EIR and, therefore, there are no impacts associated with development of this area that should be discussed in the EIR. No revisions to the Draft EIR are necessary.

Chapter 3
Text Revisions to the Draft EIR

This chapter includes revisions to the Draft EIR as errata, as allowed by CEQA. The revisions are presented in the order in which they appear in the Draft EIR, with the relevant page number(s) indicated with *italicized* print. New or revised text is shown with underline for additions and ~~strike-out~~ for deletions.

After considering all comments received on the Draft EIR, the lead agency has determined that the changes do not result in a need to recirculate the Draft EIR. Under the CEQA Guidelines, recirculation is required when new significant information identifies any of the following.

- A new significant environmental impact resulting from the project or from a new mitigation measure proposed to be implemented.
- A substantial increase in the severity of an environmental impact unless mitigation measures are adopted that reduce the impact to a level of insignificance.
- A feasible project alternative or mitigation measure, considerably different from others previously analyzed, which clearly would lessen the significant environmental impacts of the project, but that the project's proponents decline to adopt.
- That the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded (Guidelines Sec. 15088.5[a]).

All text revisions are to provide clarification or additional detail. Recirculation of a draft EIR is not required where the new information merely clarifies, amplifies, or makes minor modifications to an adequate EIR (Guidelines Sec. 15088[b]).

Chapter 3 – Setting, Impacts, and Mitigation Measures

3.1 Aesthetics

The first paragraph under Mitigation Measure CC-AES-2, on page 3.1-21, has been revised as follows.

Mitigation Measure CC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Cañada College

Buildings associated with the Project to be located within scenic vista views ~~(new Building 1, Kinesiology/Wellness)~~ will be designed in a manner that allows these features to blend with the surrounding built and natural environments so that these structures complement the visual landscape. The District will meet with the Town of Woodside Manager regarding the architecture of Building 1 at Cañada College. The following measures will be applied.

- Visible roofing materials will be selected to balance aesthetics with energy performance and compliance with codes and standards using a color shade that is visually cohesive with and darker than the general surrounding natural area. Colors may be chosen from the U.S. Department of the Interior Bureau of Land Management (BLM) Standard Environmental

Colors Chart CC-001: June 2008. The building designer will employ the use of color panels as mock-ups which will be evaluated from key observation points during common lighting conditions (front versus backlighting) to aid in the appropriate color selection. Panels will be a minimum of 3 by 2 feet in dimension and will be evaluated from various distances, but within 1,000 feet, to ensure the best possible color selection. Color selection will be made for the coloring of the most prevalent season, and the intent is to match the panels to this surrounding coloring and pick a color that best fits. Choosing a shade that is darker will allow the surface to recede and blend within the visual landscape whereas a lighter color advances or is more apparent within the visual landscape.

- New building facades will be ~~painted~~ finished in earth tones to help buildings blend better within the natural setting. White and lighter beiges and tans, which would make buildings stand out and contrast against nearby darker tree canopies, will be avoided.

The first paragraph under Impact CC-AES-4 on page 3.1-23 has been revised as follows.

Existing sources of light and glare in the Project vicinity include general campus lighting from buildings, lit pathways, sports fields (safety lighting only—not competition lighting, which would be of a higher intensity), roadway and parking lots, light from vehicles traveling on internal and adjacent roadways, and street lights along Farm Hill Boulevard. The existing building at the site of proposed Building 1 includes interior light that is visible through the windows, when seen from surrounding areas, including from I-280. The new Building 1 would replace this existing building and, although the new Building 1 would be larger than the existing building, it would not be as tall. The new Building 1 would have more windows than the existing Building 1, but as illustrated by the simulation in Figure 3.1-5, the interior lighting would not appear to be as bright as the existing white building. Therefore, interior lights would be comparable to the current levels of interior lighting and brightness associated with the existing building. However, Mitigation Measure CC-AES-3 would ensure that impacts associated with interior lighting associated with the new Building 1 are not significant. In the evening, the dominant source of light emanating from Building 1 would be the exterior ~~L~~lighting associated with the new swimming pools adjacent to and east of the new Building 1, Kinesiology/Wellness. Any interior lighting from Building 1 would be minimal compared with the pool lighting. Other new sources of lighting associated with the Project would include new lighting at both proposed parking expansion areas ~~and at the two proposed swimming pools adjacent to and east of the new Building 1, Kinesiology/Wellness~~.

A new first paragraph under Mitigation Measure CC-AES-3, on page 3.1-24, has been added as follows.

Mitigation Measure CC-AES-3: Apply minimum lighting standards at Cañada College

The District will implement an interior lighting policy for all new buildings that does the following:

- Building design would be required to include low-intensity interior safety lighting for use during afterhours. This practice would decrease the amount of nighttime light that would occur from using standard interior lighting as safety lighting.
- Use of interior lights to ensure building safety as required by code, but the unnecessary overuse of interior nighttime lighting would be prevented by requiring that interior spaces implement a "lights-off" policy. This practice requires that all non-safety lighting be turned off at night (such as in offices, classrooms, and hallways), after instructional

hours. This may be accommodated by utilizing automatic motion sensor lighting that is programmed for use afterhours.

- Use of harsh mercury vapor or low-pressure sodium bulbs would be prohibited.

All artificial outdoor lighting will be limited to safety and security requirements, designed using Illuminating Engineering Society's design guidelines and in compliance with International Dark-Sky Association approved fixtures. All lighting is designed to have minimum impact on the surrounding environment and will use downcast, cut-off type fixtures that direct the light only towards objects requiring illumination. Shielding will be utilized, where needed, to ensure light pollution is minimized. Therefore, lights will be installed at the lowest allowable height and cast low-angle illumination while minimizing incidental light spill onto adjacent properties, open spaces, or backscatter into the nighttime sky. The lowest allowable illuminance level will be used for all lighted areas and the amount of nighttime lights needed to light an area will be minimized to the highest degree possible. Light fixtures will have non-glare finishes that will not cause reflective daytime glare. Lighting will be designed for energy efficiency and have daylight sensors or be timed with an on/off program. Lights will provide good color rendering with natural light qualities with the minimum intensity feasible for security, safety, and personnel access. Lighting, including light color rendering and fixture types, will be designed to be aesthetically pleasing.

LED lighting will avoid the use of blue-rich white light lamps and use a correlated color temperature that is no higher than 3,000 Kelvin (International Dark-Sky Association 2010a, 2010b, 2015). Wherever possible and pragmatic, the District will use fixtures and lighting control systems that conform to International Dark-Sky Associations Fixture Seal of Approval program. In addition, LED lights will use shielding to ensure nuisance glare and that light spill does not affect sensitive residential viewers.

Lights along pathways and safety lighting at building entrances and loading areas will employ shielding to minimize offsite light spill and glare and be screened and directed away from residences and adjacent uses to the highest degree possible. The amount of nighttime lights used along pathways will be minimized to the highest degree possible to ensure that spaces are not unnecessarily over-lit, while still maintaining minimum adequate lighting to provide necessary visibility for security. For example, the amount of light can be reduced by limiting the amount of ornamental light posts to higher use areas and by using hooded wall mounts or bollard lighting on travel way portions of pathways.

In particular, pool lighting will employ spill and glare control features to minimize off-site light pollution. Luminaires will be chosen for the ability to provide horizontal and vertical beam control for better control in directing what is illuminated. In addition, shielding, such as a visor, will be used to further direct light and reduce light spill and ambient light glow. Luminaires will also incorporate photometric reflector systems that are designed to reduce light pollution.

Technologies to reduce light pollution evolve over time and design measures that are currently available may help but may not be the most effective means of controlling light pollution once the Project is designed. Therefore, all design measures used to reduce light pollution will employ the technologies available at the time of Project design to allow for the highest potential reduction in light pollution.

The last sentence under Impact CSM-AES-4, on page 3.1-27, has been revised to correct a typographical error as follows.

Impact CSM-AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area (less than significant with mitigation)

Existing sources of light and glare on and near the campus that can be seen from nearby residences and local roadways where views permit include general campus lighting from buildings, lit pathways, sports fields, and parking lots; light from vehicles travelling on internal and adjacent roadways; and street lights along Perimeter Road. This includes lighting associated with parking lots, the amphitheater, and vehicles in the North Gateway campus area, as seen by residences north, east, and west of the campus. Upgrades to existing buildings would not increase glare, and glare from the new Building 8, Gymnasium, and Building 19, Center for Innovation and Emerging Technologies, is expected to be minimal due existing developed nature of the area, the presence of existing vegetative screening, and additional proposed campus landscaping that would further reduce glare. Some new lighting would be installed at the Corporation Yard for security and could create a new source of light that would adversely affect nighttime views in the area if not properly designed. Tree removal and pruning could remove vegetation that helps to screen existing and proposed sources of light. However, the area is already well-lit and the tree removal and pruning would not likely result in perceptible changes in existing light and glare. Furthermore, with implementation of **Mitigation Measure CSM-AES-4,** any new light fixtures installed as part of the Project would be compliant with "dark sky" standards and directed downward and with the minimal intensity necessary to achieve the safety and security standards desired by the District for a particular area so that new sources of light would not result in notable changes compared to existing levels. With implementation of **Mitigation Measure ~~CSM-AES-2~~ CSM-AES-4**, impacts would be less than significant.

Mitigation Measure SC-AES-2 on page 3.1-30 and 3.1-32 has been revised because, with the text change to Mitigation Measure CC-AES-2 described above, Mitigation Measure SC-AES-2 would no longer be the same Mitigation Measure CC-AES-2.

Mitigation Measure SC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Skyline College

~~This mitigation is the same as Mitigation Measure CC-AES-2 described under Impact CC-AES-2, but would be implemented at Skyline College.~~

Buildings associated with the Project to be located within scenic vista views be designed in a manner that allows these features to blend with the surrounding built and natural environments so that these structures complement the visual landscape. The following measures will be applied.

- Visible roofing materials will be selected to balance aesthetics with energy performance and compliance with codes and standards using a color shade that is visually cohesive with and darker than the general surrounding natural area. Colors may be chosen from the U.S. Department of the Interior Bureau of Land Management (BLM) Standard Environmental Colors Chart CC-001: June 2008. The building designer will employ the use of color panels as mock-ups which will be evaluated from key observation points during common lighting conditions (front versus backlighting) to aid in the appropriate color selection. Panels will be a minimum of 3 by 2 feet in dimension and will be evaluated from various distances, but

within 1,000 feet, to ensure the best possible color selection. Color selection will be made for the coloring of the most prevalent season, and the intent is to match the panels to this surrounding coloring and pick a color that best fits. Choosing a shade that is darker will allow the surface to recede and blend within the visual landscape whereas a lighter color advances or is more apparent within the visual landscape.

- New building facades will be finished in earth tones to help buildings blend better within the natural setting. White and lighter beiges and tans, which would make buildings stand out and contrast against nearby darker tree canopies, will be avoided.

The last sentence of the fourth paragraph, on page 3.1-33, in Section 3.1.4.4, Cumulative Impacts, *has been revised to correct a typographical error as follows.*

At CSM, as described in Section 3.1.4.3, the area has rolling terrain and affords quality scenic vistas, and the Project affects a ridgeline view that is seen as a partial element within wider vista views. State scenic highways would not be affected, and the Project would also not affect views from County and local scenic roadways (Alameda de las Pulgas, Crystal Springs Road, Polhemus Road, and SR 92) because existing terrain, vegetation, and development buffer views of the Project area. The proposed design of buildings and proposed campus landscaping ensure that the Project minimizes visual impacts to the degree possible, in the few locations limited views of the changes would be present, so that they are not cumulatively considerable. In addition, the campus is currently well-lit and the surrounding area is currently well-lit. However, lighting associated with the Project could increase the amount of nighttime lighting and could result in a considerable contribution to cumulative impacts related to ambient light glow and light pollution in the area. However, **Mitigation Measure ~~CSM-AES-2~~ CSM-AES-4** would reduce these impacts to a less-than-significant level.

3.3 Biological Resources

Mitigation Measure CC-BIO-1 on page 3.3-24 has been revised as follows.

Mitigation Measure CC-BIO-1: Implement special-status plant species avoidance and revegetation measures at Cañada College

Prior to construction, the District will retain a qualified botanist to survey any areas of proposed construction disturbance that contain suitable habitat for western leatherwood, fragrant fritillary, congested-headed hayfield tarplant, Choris' popcornflower, and showy Rancheria clover. The qualified botanist will survey appropriate areas of suitable habitat for the species during each species' blooming period (**Table 3.3-2**). Surveys will be conducted in accordance with CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (California Department of Fish and Game 2009).

If no special-status plants are identified during the design-period surveys, then no further action is necessary. If one or more special-status species is found within areas proposed for disturbance, then the occurrence will be avoided, if feasible. If avoidance is not possible, a revegetation and monitoring plan will be developed and executed by a qualified botanist retained by the District prior to ground disturbance that would affect the plants. The revegetation and monitoring plan will include the following components.

- Collection of seed prior to disturbance.

- Reseeding and revegetation on a site with suitable soils and exposure.
- Regular monitoring to evaluate the success of the reseeding and revegetation and remedial measures if necessary.

Details regarding specific monitoring protocols, success criteria, and the length of the monitoring program will be developed in coordination with and approved by the appropriate regulatory agencies.

~~The plan will include revegetation success criteria of 80% of the reseeded target area, perpetual conservation of restoration areas, weed management, limitations on human access, monitoring for at least five years and until successful revegetation is demonstrated for 3 consecutive years and remediation measures if success is not achieved by year 5. In the event that success is not achieved by year 5, monitoring will continue until the success criteria are completely satisfied for 3 consecutive years.~~

3.8 Hydrology and Water Quality

The second paragraph under Surface Hydrology *on page 3.8-13 has been revised as follows.*

No streams, creeks, or other surface water bodies are found within Cañada College or its immediate vicinity. The topography surrounding Cañada College campus is hilly. The campus drains outward in all directions toward its property boundary, and storm drainage is discharged from multiple locations. The majority of runoff drains to the northeast into Redwood City via the Redwood Creek drainage area and ultimately into San Francisco Bay. Redwood Creek and its tributary, Arroyo Ojo de Agua Creek, are the closest receiving waters to the Cañada College campus. A few outfalls which discharge to the south first discharge runoff into the town of Woodside before entering the Redwood City storm drainage system (San Mateo County Community College District 2013). Storm drain facilities include a network of pipes consisting of a combination of corrugated metal pipe (CMP), reinforced concrete pipe (RCP), polyvinyl chloride pipe (PVC), and high density polyethylene (HDPE) pipe. Older pipe networks tend to be composed of concrete and corrugated metal pipe. Newer construction uses more HDPE and PVC pipe (San Mateo County Community College District 2013).

The second paragraph under Operation *under Impact CC-HYD-1 has been revised as follows.*

Of the 124 acres at Cañada College, approximately 4.9 acres would be new impervious area due to new buildings and expansion of parking lots as part of the Cañada College project improvements (**Table 3.8-8**). The increase in impervious surface over existing conditions would result in increased rates and quantities of stormwater runoff. Runoff from the new impervious surfaces could contain nonpoint pollution sources typical of urban settings and associated with automobiles, trash, cleaning solutions, and landscaped areas. Areas with campus improvements would be drained by a combination of new and existing onsite storm drain systems. All flows from the campus would continue to be conveyed to storm drain systems that discharge to the Redwood City storm drain system, which flows through the Redwood Creek subwatershed~~which ultimately discharges to the San Francisco~~ of the larger South Bay Watershed.

Mitigation Measure CC-HYD-2, on page 3.8-27, has been revised as follows.

Mitigation Measure CC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Cañada College

The District will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit the volume of additional stormwater runoff by matching postproject flows to preproject flows, and provide for onsite treatment of contaminants. These facility improvement areas will be open, level areas vegetated to allow runoff to be distributed evenly across the area. Generally, ~~T~~they will be designed to treat runoff by filtering raw runoff through the soil media in the treatment area to trap particulate pollutants (suspended solids and trace metals) and promote infiltration. However, alternative methods to treat runoff may be used, such as bio-filtration basins, underground detention and retention vaults or tanks, gravel beds, perforated pipes, stormwater chambers, pervious pavement, and green roofs that contain filtration media. Project areas will be designed to treat runoff so that pollutants (e.g., sediment, landscape fertilizers and/or pesticides, oil from parking areas) can be filtered out and, therefore, the Project will not contribute a substantial number of additional pollutants to runoff.

Maintenance of these features will be performed routinely to prevent sediment buildup and clogging in order to ensure optimal pollutant removal efficiency. Maintenance activities will include those listed below and would be done periodically.

- Remove obstructions, debris and trash and dispose of properly.
- Inspect to ensure proper drainage between storms and within 5 days following measurable rainfall.
- Inspect inlets for channels, soil exposure, or other evidence of erosion.
- Remove obstructions and sediment.
- Maintain vegetation via pruning and weeding, and treat with preventative and low-toxic methods.
- Check that mulch is maintained at an appropriate depth and replenish as necessary.
- Use soil that meets specifications included in the SMCWPPP C.3 Stormwater Technical Guidance Manual, or comparable document. Specifically, soils must percolate at a rate of 5 to 10 inches per hour.

A facility improvement area inspection and maintenance checklist will be used to conduct inspections, identify needed maintenance, and record maintenance that is conducted. Operation of the hydromodification features is expected to improve the quality of stormwater from the Project site. Maintenance of these areas would help eliminate or minimize impacts on stormwater quality.

3.10 Noise

The description of construction hours by jurisdiction on page 3.10-2 has been revised as follows.

Hours of the day that construction is allowed vary between the local jurisdictions as follows:

- County of San Mateo: 7:00 a.m. to 6:00 p.m. on weekdays, 9:00 a.m. to 5:00 p.m. on Saturday, and not at all on Sundays, Thanksgiving, or Christmas.
- Redwood City: 7:00 a.m. to 8:00 p.m. on weekdays.
- Woodside: 7:30 a.m. to 5:30 p.m. on weekdays and 8:00 a.m. to 1:00 p.m. on ~~Sundays~~ Saturdays.
- San Mateo: 7:00 a.m. to 7:00 p.m. on weekdays, 8:00 a.m. to 5:00 p.m. on Saturdays, and 12:00 p.m. to 4:00 p.m. on Sundays and holidays.
- San Bruno: 85 dBA limit at 100 feet between 7:00 a.m. and 10:00 p.m. and 60 dBA limit at 100 feet between 10:00 p.m. and 7:00 a.m.

The District would limit construction to the hours of 6:00 a.m. to 7:00 p.m. on weekdays and weekends, if necessary. Accordingly, the District's construction plan may not be consistent with local limits on hours of construction.

The description under the Town of Woodside Municipal Code on page 3.10-4 has been revised as follows.

Town of Woodside General Plan

The Woodside General Plan Noise Element, as adopted in 2012, prescribes noise exposure criteria and standards for new development.

The Town's maximum ambient noise levels chart indicates that exterior noise above 55 Ldn would result in a noise impact on residential and open space land uses and exterior noise above 60 Ldn would result in a noise impact on commercial land uses.

The Woodside General Plan Noise Element also includes several best management practices for controlling construction noise.

Town of Woodside Municipal Code

~~The Woodside General Plan Noise Element, as adopted in 2012, does not have guidelines that are specifically relevant to the Project.~~

While the Town of Woodside does not have a noise ordinance, the City's municipal code puts limitations on construction hours and specifies noise limits at construction sites. The Town of Woodside Municipal Code states:

> *Hours of operation.* All site development and building construction operations shall be carried on only between the hours of 7:30 a.m. and 5:30 p.m., Monday through Friday, and 8:00 a.m. to 1:00 p.m. Saturdays, unless the town engineer finds that work at other times or days would not imperil or inconvenience the public, or create a nuisance, in which case he/she may by written permission, allow the work to proceed during such other hours as may be necessary.

3.12 Public Services and Utilities

The description under Fire Protection Services on page 3.12-3 has been revised as follows.

Fire Protection Services

Cañada College campus is served by ~~both~~ the Woodside Fire Protection District (WFPD~~) and the Redwood City Fire Department (RCFD)~~. WFPD employs 1 fire chief, 4 battalion chiefs, 9 fire captains, 1 fire marshal, 33 firefighter and firefighter paramedics, and administrative staff (Woodside Fire Protection District 2015). ~~RCFD employs 90 staff members, including firefighters, firefighter/ paramedics, captains, battalion chiefs, fire prevention staff, training staff, and administrative staff (City of Redwood City 2015a).~~ Currently, the WFPD and the Redwood City Fire Department (RCFD) operate under a mutual aid agreement, whereby personnel and equipment can be dispatched to the site from WFPD and/or RCFD stations located near the Cañada College campus. The nearest fire station to the campus is WFPD Station #19 at 850 California Way in Emerald Hills, about 1 mile northeast. ~~The nearest station within the RCFD is Station #12 at 3700 Jefferson Avenue in Redwood City, about 2.5 miles east of the campus. RCFD Station 12's average response time is 5 minutes and 13 sections (City of Redwood City 2010).~~

The first paragraph under Wastewater *on page 3.12-5 has been revised as follows.*

Wastewater

The City of Redwood City Public Works Services Department provides sewer collection services to the Cañada College campus. The City's sanitary sewer collection system operates primarily via gravity flow and consists of approximately 192 miles of sewer mains, along with 31 sewer lift stations (City of Redwood City 2010). The sewage is treated at the ~~South Bayside System Authority (SBSA)~~ Silicon Valley Clean Water (SVCW) Wastewater Treatment Plant, located on the western shore of San Francisco Bay. ~~This facility provides secondary treatment of domestic and industrial wastewater to cities in southern San Mateo County.~~ SCVW serves more than 200,000 people and businesses in its service area and treats wastewater in an advanced, two-stage biological treatment facility. Redwood City's average dry weather allocation at the SBSA treatment plant is 13.8 million gallons per day and peak wet weather allocation is 30.5 million gallons per day (City of Redwood City 2010). Treated wastewater is discharged into the San Francisco Bay.

SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT

Draft Environmental Impact Report for the 2015 Facilities Master Plan Amendment

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August 2015

Cañada College

College of San Mateo

Skyline COLLEGE

DRAFT ENVIRONMENTAL IMPACT REPORT

SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT

2015 FACILITIES MASTER PLAN AMENDMENT

STATE CLEARINGHOUSE #2015052007

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August 2015

ICF International. 2015. *San Mateo County Community College District 2015 Facilities Master Plan Amendment.* Draft EIR. August. (ICF 00234.15.) San Francisco, CA. Prepared for San Mateo County Community College District, San Mateo, CA.

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Acronyms and Abbreviations

ABAG	Association of Bay Area Governments
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing material
ADA	Americans with Disabilities Act
Alquist-Priolo Act	Alquist-Priolo Earthquake Fault Zoning Act
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
AVE	area of visual effect
BAAQMD	Bay Area Air Quality Management District
BLM	Bureau of Land Management
BMPs	best management practices
C/CAG	City/County Association of Governments of San Mateo County
CalARP	California Accidental Release Prevention Program
Cal-EPA	California Environmental Protection Agency
CALFIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CBSC	California Building Standards Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
CHSC	California Health and Safety Code
CIP	Capital Improvement Program
CMP	Congestion Management Program
CNEL	community noise equivalent level
CRHR	California Register of Historical Resources
CSM	College of San Mateo
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dBA	A-Weighted Decibel
dBC	C-Weighted Decibel
District	San Mateo County Community College District
DOT	U.S. Department of Transportation
DPR	California Department of Pesticides Regulation
DSA	Division of the State Architect
DTSC	Department of Toxic Substances Control
du/ac max	dwelling units/acres maximum
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
ESA	federal Endangered Species Act
FAA	Federal Aviation Administration

FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
GREET	Gases, Regulated Emissions, and Energy Use in Transportation Model
HCD	California Department of Housing and Community Development
HDPE	high density polyethylene
HMBP	Hazardous Materials Business Plan
HPD	Historic Properties Directory
Hz	Hertz
I-280	Interstate 280
IBC	International Building Code
ITE Manual	Institute of Transportation Engineers Trip Generation Manual
L_{dn}	day-night sound level
L_{eq}	combined average noise level
LID	Low Impact Development
L_{max}	maximum noise level
L_{min}	minimum sound level
LOS	level of service
L_{xx}	Percentile-Exceeded Sound Level
MAA	Management Agency Agreement
MBTA	Migratory Bird Treaty Act
milligrams per liter	mg/L
MS4	NPDES General Permit for Municipal Separate Storm Sewer Systems
NAHC	Native American Heritage Commission
NCP	National Contingency Plan
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NTU	nephelometric turbidity unit
NWIC	Northwest Information Center
O&M	Operation and maintenance
OHP	Office of Historic Preservation
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated Biphenyls
Peak Velocity or PPV	Peak Particle Velocity
PM10	particulate matter over 10 microns in size
PRC	California Public Resources Code
Project	2015 Facilities Master Plan Amendment
PV	photovoltaic
PVC	polyvinyl chloride pipe
RCP	reinforced concrete pipe
RCRA	Resource Conservation and Recovery Act of 1976
Regional Water Board	San Francisco Bay Regional Water Quality Control Board
RHNA	Regional Housing Needs Allocation

RMP	Risk Management Plan
RMS	root-mean-square
RWD	Report of Waste Discharge
SamTrans	San Mateo County Transit District
sf	square foot
SFO	San Francisco International Airport
SFPUC	San Francisco Public Utilities Commission
SMCEHD	San Mateo County Health Department, Environmental Health Division
SMCWPPP	San Mateo Countywide Water Pollution Prevention Program
SPCCP	Spill Prevention, Control, and Countermeasure Program
SR	State Route
State Water Board	State Water Resources Control Board
SVP	Society of Vertebrate Paleontology
SWMP	Stormwater Management Plans
SWPPP	Storm Water Pollution Prevention Plan
TMDL	total maximum daily load
TNM	traffic noise model
TSCA	Toxic Substances Control Act
Unified Program	Unified Hazardous Waste and Hazardous Materials Management Regulatory Program
USACE	United States Army Corps of Engineers
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	Underground Storage Tank
VdB	level in decibel units
VP	vantage point
WDR	Waste Discharge Requirement

Executive Summary

This Draft Environmental Impact Report (EIR) has been prepared in accordance with the provisions of the California Environmental Quality Act (CEQA) to evaluate the potential impacts of the proposed *2015 Facilities Master Plan Amendment* (Project). As required by Section 15123 of the State CEQA Guidelines, this executive summary contains the following.

- Project Overview
- Project Objectives
- Project Impacts and Mitigation Measures
- Project Alternatives
- Potential Areas of Controversy and Issues to be Resolved

Project Overview

In January 2015, the Board of Trustees of the San Mateo County Community College District (District) approved the Project. The plan amendment identifies planned improvements at each of the District's three campuses—Cañada College, College of San Mateo (CSM), and Skyline College—to continue the modernization and renovation work that began with adoption of the District's 2001 and 2006 facilities master plans. The improvements at each of the campuses include building modernization and renovation; building demolition and new building construction; landscape, hardscape and pedestrian walkway improvements; parking expansion/reconfiguration and roadway modifications; and renewable energy and water conserving installations.

Cañada College

Cañada College is located in Redwood City and Woodside. **Table ES-1** summarizes the proposed improvements at Cañada College. The location of each of the improvements is shown in **Figure ES-1**.

Table ES-1. Proposed Facilities Improvements at Cañada College

Proposed Improvement	Facility	Approximate Size
Building Demolition	• Building 1, Gymnasium	39,000 sf
New Building Construction	• Building 1, Kinesiology/Wellness	85,000 sf
	• Building 23, Math/Science/Engineering	55,000 sf
Modernization and Renovation	• Building 3, Performing Arts Center • Building 9, Library/Student Resource Center • Building 13, Multi-Disciplinary Instructional Center • Building 16, Instructional Building • Building 18, Instructional Building	--[a]
Pedestrian Improvements	• North Quad development, between existing Buildings 17 and 22	50,000 sf [b]
Parking Lot Expansion	• Lot 6	325 parking spaces
	• Lot 10	150–200 parking spaces
Potential Renewable Energy Installations	• Building 1, Kinesiology/Wellness	30 kwh/sf/yr (maximum)
	• Building 23, Math/Science/Engineering	30 kwf/sf/yr (maximum)

Notes:

[a] Modernization and renovation could include interior and exterior improvements, but the overall building structures and size would not change.

[b] The size of the pedestrian improvements is unknown at this time but is estimated to be within the currently paved or disturbed area of 50,000 sf based on the area shown in **Figure ES-1**.

sf = square feet

kwh/sf/yr = kilowatt-hours per square foot per year

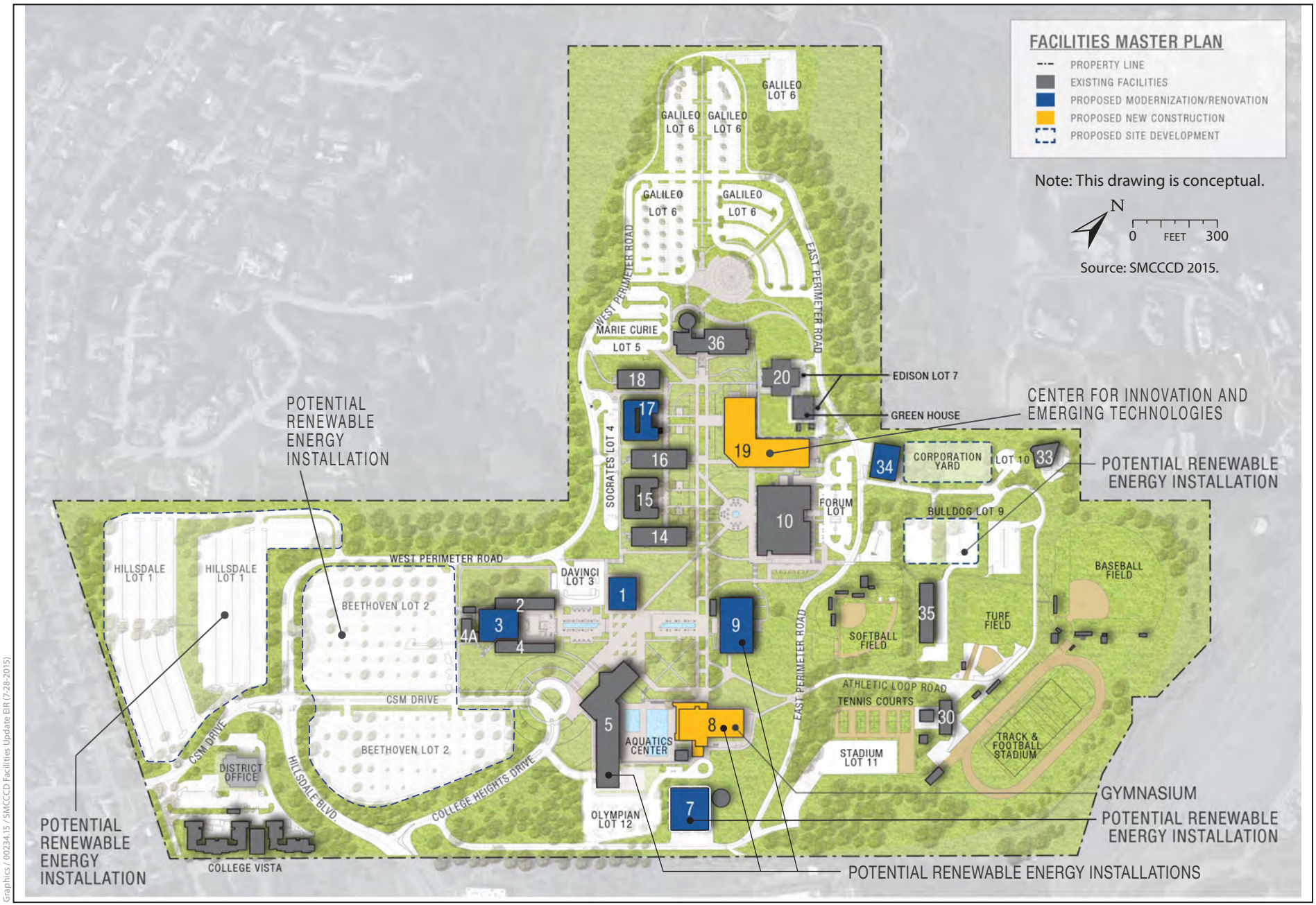
College of San Mateo

CSM is located in the city of San Mateo. **Table ES-2** summarizes the proposed improvements at CSM. The location of each of the improvements is shown in **Figure ES-2**.



Graphics / 00234.15 / SMCCCD Facilities Update EIR (7-13-2015)

Figure ES-1
Proposed Improvements at Cañada College



Graphics / 00234.15 / SMCCCD Facilities Update EIR (7-28-2015)

Figure ES-2
Proposed Improvements at College of San Mateo

Table ES-2. Proposed Facilities Improvements at the College of San Mateo

Proposed Improvement	Facility	Approximate Size
Building Demolition	• Building 8, Gymnasium • Building 12, East Hall • Building 19, Emerging Technologies	56,000 sf 22,376 sf 30,856 sf
New Building Construction	• Building 8, Gymnasium • Building 19, Center for Innovation and Emerging Technologies	75,000–80,000 sf 53,250 sf
Modernization and Renovation	• Building 1, Public Safety/Multi-Disciplinary • Building 3, Humanities/Arts • Building 7, Facilities Maintenance Center • Building 9, Library/KCSM Television and Radio • Building 17, Student Support Services • Building 34, Fire Science/Information Technology Services Management • Corporation Yard	--[a]
Potential Renewable Energy Installations	• Lots 1, 2, and/or 9 (solar)	30 kwh/sf/yr (maximum)
	• Building 7, Facilities Maintenance Center (cogeneration)	30 kwh/sf/yr (maximum)
	• Buildings 5 and 8 (solar and/or solar thermal)	30 kwh/sf/yr (maximum)
	• Building 9 (Potential vertical axis turbine adjacent to B9)	30 kwh/sf/yr (maximum)

Notes:

[a] Modernization and renovation could include interior and exterior improvements, but the overall building structures and size would not change.

sf = square feet

kwh/sf/yr = kilowatt-hours per square foot per year

Skyline College

Skyline College is located in San Bruno. **Table ES-3** summarizes the proposed improvements at Skyline College. The location of each of the improvements is shown in **Figure ES-3**.

Table ES-3. Proposed Facilities Improvements at Skyline College

Proposed Improvement	Facility	Approximate Size
Building Demolition	• Building 1, Social Science/Creative Arts Programs	78,000 sf
	• Buildings 19 and 20 (Pacific Heights)	39,000 sf
New Building Construction	• Building 1, Social Science/Creative Arts Programs	120,000 sf
	• Building 12, Environmental Sciences	20,000 sf
	• Boiler Room and Utilities Plant	3,000–5,000 sf
	• Building 15, Career and Sustainable Technology	8,500–10,000 sf
	• Residential Complex	Up to 71 units (47 single-family and 24 multi-family) on 8 acres
Modernization and Renovation	• Building 2, Workforce/Economic Development Prosperity Center • Building 5, Library/Learning Resource Center • Building 14, Early Childhood Education (Loma Chica)	--[a]
Pedestrian Improvements	• South Pedestrian Gateway, south of Building 1	200,000 sf[b]
	• Pedestrian connection between Environmental Sciences Building and Building 8	400 feet long[b]
Parking Lot Expansion	• Lot L	125–175 new parking stalls
Potential Renewable Energy Installations	• Building 1/1A (cogeneration, energy storage, solar thermal)	30 kwh/sf/yr (maximum)
	• Lots 1,2 and/or 9 (solar)	30 kwh/sf/yr (maximum)

Notes:

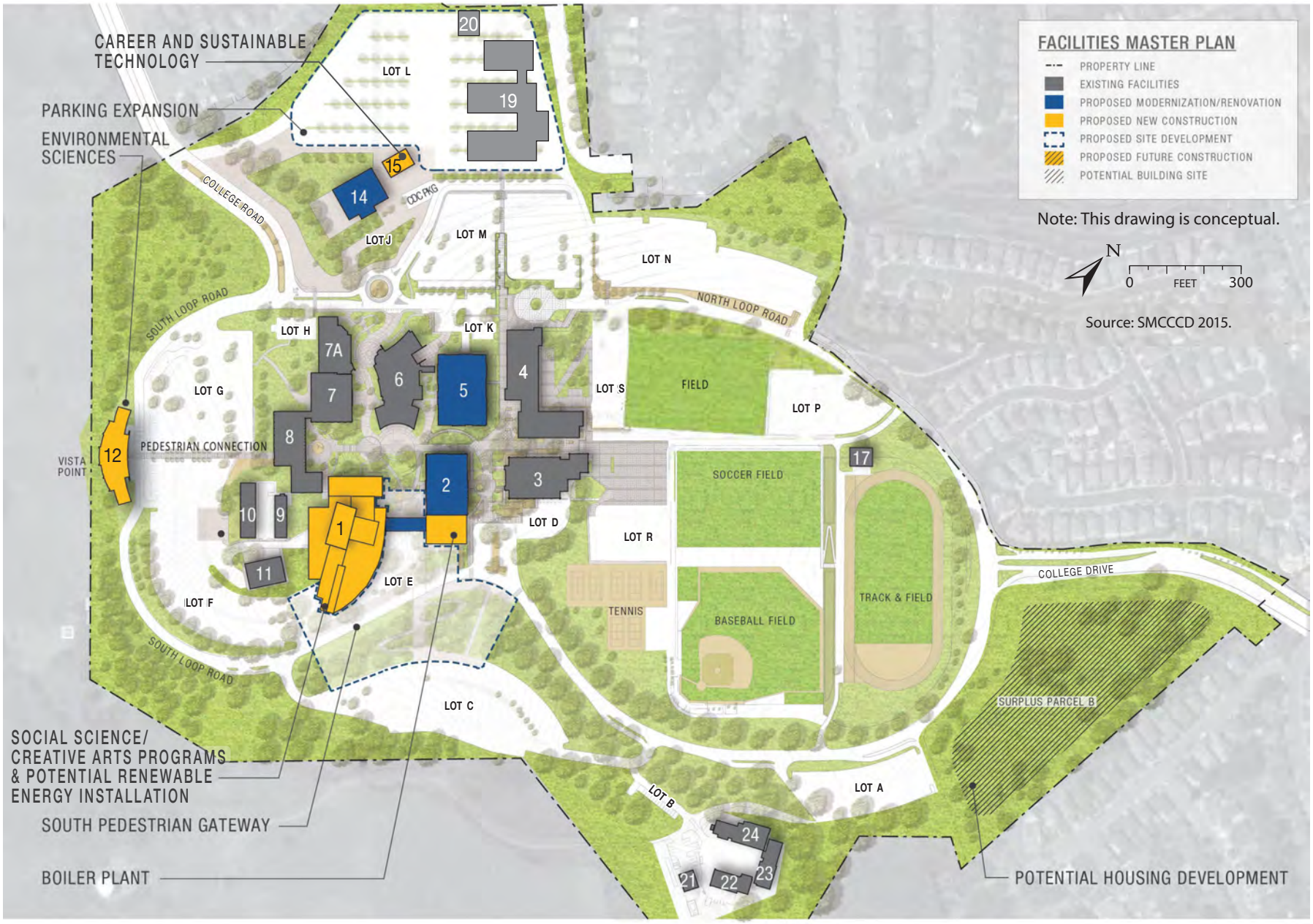
[a] Modernization and renovation could include interior and exterior improvements, but the overall building structures and size would not change.

[b] The size of the pedestrian improvements is unknown at this time but is estimated to be within the currently paved or disturbed area identified in the table, based on the area shown in **Figure ES-3**.

sf = square feet

kwh/sf/yr = kilowatt-hours per square foot per year

Refer to Chapter 2, *Project Description*, for a detailed description of the Project components.



Graphics...0023415 (7-30-2015)

Figure ES-3
Proposed Improvements at Skyline College

Project Objectives

The District has identified the following objectives for the Project:

- To better serve approximately the same number of current students and staff at each campus and to prepare students for universities and high-demand jobs, the District plans to provide modern facilities and technology for the foreseeable future; improve access for disabled students; ensure classrooms meet earthquake, fire and safety requirements; replace aging infrastructure with energy efficient systems; improve pedestrian flow between buildings, make landscape and hardscape improvements, and better align parking lots and roadways.

Project Impacts and Mitigation Measures

Summary of Project Impacts

The Project impacts are summarized in **Table ES-4** (presented at the end of this summary). For potentially significant impacts, mitigation measures are identified, where feasible, to reduce the impact on environmental resources to a less-than-significant level. Refer to Chapter 3, *Setting, Impacts, and Mitigation Measures*, for a detailed discussion of Project impacts and detailed descriptions of the mitigation measures.

Significant and Unavoidable Impacts

Impacts related to the following topic would remain significant with the implementation of mitigation.

- Air Quality: Exposure of offsite sensitive receptors to construction related diesel particulate matter (DPM) and fine particulate matter (PM2.5) at the College of San Mateo.

Project Alternatives

State CEQA Guidelines Section 15126.6 require an EIR to evaluate the No Project Alternative and a reasonable range of alternatives to the Project that would feasibly attain most of the Project's basic objectives but that would avoid or substantially reduce any identified significant environmental impacts of the Project. The Project alternatives present options that could reduce a significant impact to a less-than-significant level.

The following alternatives to the Project were analyzed in Chapter 5, *Alternatives*.

- **CC-Alternative 1: No Project.** None of the activities associated with the Project would be undertaken. The existing Cañada College facilities would be unchanged.
- **CC-Alternative 2: Reduced Size Kinesiology/Wellness Building.** The Project would proceed as proposed, including the proposed swimming pools, but with a smaller Kinesiology/Wellness building intended to minimize aesthetic changes. Under CC-Alternative 2, the new building would be the same height and dimensions as the existing Building 1, Gymnasium, and would be built on the same footprint. The existing Building 1, Gymnasium (39,000 square feet in area) is

approximately 45% of the size of the proposed Kinesiology/Wellness Building (85,000 square feet in area). Consequently, under CC-Alternative 2, the number of expected student/faculty/staff/public memberships at the proposed health club would be fewer. For purposes of analysis, the number of memberships under CC-Alternative 2 is estimated at 2,750 rather than 6,000 for the Project. CC-Alternative 2 would not need the full expansion of Lot 6 that is proposed with the Project.

- **CSM-Alternative 1: No Project.** None of the activities associated with the Project would be undertaken. The existing CSM facilities would be unchanged.
- **CSM-Alternative 2: Additional Solar Energy.** Under CSM-Alternative 2, the District would install additional solar energy recovery systems on campus in those parking lots that are not slated for solar energy recovery systems in the Project. The additional renewable energy capacity would help to offset the greenhouse gas emissions from campus operations.
- **SC-Alternative 1: No Project.** None of the activities associated with the Project would be undertaken. The existing Skyline College facilities would be unchanged and there would be no residential complex.
- **SC-Alternative 2: Reduced Density Residential Complex.** The proposed 71-dwelling unit residential complex would exceed the residential density currently provided for in the City of San Bruno General Plan for Surplus Parcel B. Under SC-Alternative 2, the Project would proceed as proposed, with the exception of the residential complex. SC-Alternative 2 would propose 62 dwelling units on Surplus Parcel B, including 40 single-family homes and 22 multi-family units. This would conform to the City's current General Plan density and intensity standards without the need for a general plan amendment. The District would propose to rezone the site from Open Space to Planned Development (P-D). The rezoning would bring the site's zoning into conformity with the City's General Plan, as required by Government Code Section 65860.

Table ES-5 (presented at the end of this summary, after **Table ES-4**) provides a comparison of the potential impacts among Alternatives to the Project by resource topic. The No Project Alternative would be the environmentally superior alternative because there would be fewer construction-related impacts and fewer impacts generated from increased service population at the campuses. When comparing the action alternatives (as required by CEQA when the No Action Alternative is environmentally superior), the impacts would be the same or less. Therefore, because the alternatives are campus-specific, there is no single environmentally superior alternative, but rather there are three environmentally superior alternatives: CC-Alternative 2, CSM-Alternative 2, and SC-Alternative 2.

Potential Areas of Controversy and Issues to Be Resolved

On May 5, 2015, the District filed a Notice of Preparation (NOP) with the Governor's Office of Planning and Research. Three agencies submitted written comments regarding the scope and content of the Draft EIR during the 30-day comment period (which ended June 8, 2015). All written comments received during the comment period session were considered in the preparation of this Draft EIR. A copy of the NOP and all comments are provided in **Appendix A**. Following is a summary of the environmental comments received.

- Caltrans provided guidance on the approach to the traffic analysis, including recommendations on vehicle trip reduction, traffic impact fees, and the traffic impact study and multi-modal transportation.
- The Town of Woodside provided comments related to the potential aesthetic impacts of the proposed new Kinesiology/Wellness facility at Cañada College.
- The City of San Bruno provided comments applicable to the improvements at Skyline College. The City's comments were related to aesthetics, geology and soils, hazards and hazardous materials, noise and vibration, hydrology and water quality, traffic, and utilities and public services.

The District has not identified any areas of controversy or issues to be resolved.

Table ES-4. Summary of Project Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Cañada College			
3.1 Aesthetics			
Impact CC-AES-1: Result in temporary visual impacts caused by construction activities	Significant	CC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Cañada College CC-AES-1: Limit exterior construction activities to daylight hours at Cañada College within 0.25 mile of residences	Less than significant
Impact CC-AES-2: Substantially degrade the existing visual character or quality of the site and its surroundings, including views from scenic vistas	Significant	CC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Cañada College	Less than significant
Impact CC-AES-3: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	Significant	CC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Cañada College	Less than significant
Impact CC-AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area	Significant	CC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Cañada College CC-AES-3: Apply minimum lighting standards at Cañada College CC-AES-4: Remediate the potential for hazard glare at new Kinesiology/Wellness building at Cañada College	Less than significant
3.2 Air Quality and Energy			
Impact CC-AQE-1: Conflict with or obstruct implementation of an applicable air quality plan	Less than significant	None required	--

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact CC-AQE-2: Violate a BAAQMD air quality standard or substantially contribute to an existing or projected air quality violation during Project construction	Significant	CC-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at Cañada College CC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Cañada College CC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Cañada College CC-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at Cañada College CC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Cañada College	Less than Significant
Impact CC-AQE-3: Violate a BAAQMD air quality standard or substantially contribute to an existing or projected air quality violation during Project operation	Less than significant	None required	--
Impact CC-AQE-4: Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment	Significant	CC-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NOX emissions at Cañada College CC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NOX emissions at Cañada College CC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Cañada College CC-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at Cañada College CC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Cañada College	Less than Significant
Impact CC-AQE-5: Expose existing sensitive receptors to substantial pollutant concentrations during construction	Significant	CC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Cañada College CC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Cañada College CC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Cañada College	Less than Significant
Impact CC-AQE-6: Create objectionable odors affecting substantial number of people	Less than significant	None required	--

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact CC-AQE-7: Lead to a wasteful, inefficient, and unnecessary usage of energy	Less than significant	None required	--
3.3 Biological Resources			
Impact CC-BIO-1: Impact special-status plant species	Significant	CC-BIO-1: Implement special-status plant species avoidance and revegetation measures at Cañada College	Less than significant
Impact CC-BIO-2: Impact special-status bird species	Significant	CC-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at Cañada College	Less than significant
Impact CC-BIO-3: Impact special-status bats	Significant	CC-BIO-3: Implement fringed myotis, pallid bat, and hoary bat avoidance measures at Cañada College	Less than significant
Impact CC-BIO-4: Impact purple needle grass grasslands, a sensitive natural community	Less than significant	None required	--
Impact CC-BIO-5: Impact native wildlife nursery sites	Significant	CC-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at Cañada College	Less than significant
3.4 Cultural Resources			
Impact CC-CUL-1: Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5	No impact	None required	--
Impact CC-CUL-2: Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5	Significant	CC-CUL-1: Stop work if cultural resources are encountered during ground-disturbing activities at Cañada College	Less than significant
Impact CC-CUL-3: Disturb any human remains, including those interred outside of formal cemeteries	Significant	CC-CUL-2: Stop work if human remains are encountered during ground-disturbing activities at Cañada College	Less than significant
3.5 Geology, Soils, and Paleontology			
Impact CC-GEO-1: Expose people or structures to safety risks due to surface fault rupture resulting from seismic activity	Less than significant	None required	--
Impact CC-GEO-2: Expose people or structures to strong seismically induced groundshaking	Significant	CC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Cañada College and comply with recommendations	Less than significant
Impact CC-GEO-3: Expose people or structures to the effects of seismically induced ground failure, including liquefaction	Less than significant	None required	--

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact CC-GEO-4: Accelerate erosion during Project construction and operation	Less than significant	None required	--
Impact CC-GEO-5: Result in loss of topsoil from Project construction and operation	Significant	CC-GEO-2: Stockpile topsoil removed during construction at Cañada College and reuse stockpiled topsoil during revegetation	Less than significant
Impact CC-GEO-6: Increase risk of landslide, liquefaction, lateral spread, subsidence, or collapse, as a result of Project location on an unstable geologic unit or soil	Significant	CC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Cañada College and comply with recommendations	Less than significant
Impact CC-GEO-7: Increase risk of damage to Project structures as a result of Project location on expansive soils	Significant	CC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Cañada College and comply with recommendations	Less than significant
Impact CC-GEO-8: Result in direct or indirect destruction of a unique paleontological resource or site or unique geologic feature	Less than significant	None required	--
3.6 Greenhouse Gases			
Impact CC-GHG-1: Generate GHG emissions during Project construction	Significant	CC-GHG-1: Where feasible, implement BAAQMD's best management practices for GHG emissions at Cañada College CC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Cañada College	Less than significant
Impact CC-GHG-2: Generate GHG emissions during Project operation	Less than significant	None required	--
Impact CC-GHG-3: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases	Less than significant	None required	--
Impact CC-GHG-4: Subject property and persons to otherwise avoidable physical harm as a result of inevitable climate change	Less than significant	None required	--

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
3.7 Hazards and Hazardous Materials			
Impact CC-HAZ-1: Cause a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during Project construction or from Project operation	Significant	CC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Cañada College	Less than significant
Impact CC-HAZ-2: Cause 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 during Project construction	Significant	CC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Cañada College CC-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at Cañada College	Less than significant
Impact CC-HAZ-3: Cause 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 during Project operation	Less than significant	None required	--
Impact CC-HAZ-4: Emit or involve handling of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	Significant	CC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Cañada College CC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Cañada College CC-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at Cañada College	Less than significant
Impact CC-HAZ-5: Be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5	Less than significant	None required	--
Impact CC-HAZ-6: Interfere with adopted emergency response plan or emergency evacuation plan	Significant	CC-TRA-1: Implement a Traffic Control Plan during construction at Cañada College	Less than Significant
Impact CC-HAZ-7: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires	Significant	CC-HAZ-4: Comply with legal requirements for fire prevention during construction activities at Cañada College	Less than significant

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
3.8 Hydrology and Water Quality			
Impact CC-HYD-1: Violate any water quality standards or waste discharge requirements and/or otherwise substantially degrade water quality	Significant	CC-HYD-1: Implement erosion-control measures to protect water quality during construction at Cañada College CC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Cañada College CC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Cañada College CC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Cañada College	Less than significant
Impact CC-HYD-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level	Significant	CC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Cañada College	Less than significant
Impact CC-HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite	Significant	CC-HYD-1: Implement erosion-control measures to protect water quality during construction at Cañada College CC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Cañada College	Less than significant
Impact CC-HYD-4: Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff	Significant	CC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Cañada College	Less than significant

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact CC-HYD-5: Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place within a 100-year flood hazard area structures that would impede or redirect flood flows	Significant	CC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Cañada College	Less than significant
Impact CC-HYD-6: Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam	No impact	None required	--
Impact CC-HYD-7: Contribute to inundation by seiche, tsunami, or mudflow	Less than significant	None required	--
3.9 Land Use and Planning			
Impact CC-LUP-1: Physically divide an established community	No impact	None required	--
Impact CC-LUP-2: Conflict with applicable land use plans, policies, or regulations	No impact	None required	--
Impact CC-LUP-3: Conflict with any applicable habitat conservation plan or natural community conservation plan	No impact	None required	--
3.10 Noise			
Impact CC-NOI-1: Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies	Significant	CC-NOI-1: Employ noise-reducing construction practices at Cañada College	Less than significant
Impact CC-NOI-2: Expose persons to or generate excessive groundborne vibration or groundborne noise levels	Less than significant	None required	--
Impact CC-NOI-3: Result in a permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project	Less than significant	None required	--

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact CC-NOI-4: Result in a temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project	Significant	CC-NOI-1: Employ noise-reducing construction practices at Cañada College	Less than significant
Impact CC-NOI-5: Be located within an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the Project area to excessive noise levels	No impact	None required	--
Impact CC-NOI-6: Be located in the vicinity of a private airstrip and expose people residing or working in the Project area to excessive noise levels	No impact	None required	--
3.11 Population and Housing			
Impact CC-POP-1: Directly induce substantial population growth due to expanding existing facilities or developing new residential units	Less than significant	None required	--
Impact CC-POP-2: Indirectly induce substantial population growth due to jobs created by Project construction	Less than significant	None required	--
Impact CC-POP-3: Displace existing housing or people, necessitating the construction of replacement housing elsewhere	No impact	None required	--
3.12 Public Services and Utilities			
Impact CC-PSU-1: Reduce service ratios and response times for fire protection and police protection services during construction and operation	Less than significant	None required	--
Impact CC-PSU-2: Increase student enrollment at schools or increase level of service required at other public facilities resulting in an adverse physical impact to these facilities	No impact	None required	--

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact CC-PSU-3: Increase demand for water supply at the Project site during construction and operation	Less than significant	None required	--
Impact CC-PSU-4: Increase generation of wastewater at the Project site during construction and operation	Less than significant	None required	--
Impact CC-PSU-5: Alter stormwater drainage patterns at the Project site	Less than significant	None required	--
Impact CC-PSU-6: Increase generation of solid waste during construction and operation	Less than significant	None required	--
Impact CC-PSU-7: Comply with federal, state, and local statutes and regulations related to solid waste	No impact	None required	--
3.13 Recreation			
Impact CC-REC-1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated	No impact	None required	--
Impact CC-REC-2: Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment	Less than significant	None required	--
3.14 Transportation and Traffic			
Impact CC-TRA-1: Result in an increase in vehicle delay or deterioration of traffic operations during Project operations	Less than significant	None required	--
Impact CC-TRA-2: Potentially conflict with transit services and facilities and policies and plans related to the services during Project operations	Less than significant	None required	--

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact CC-TRA-3: Potentially conflict with local pedestrian and bicycle facilities and policies and plans regarding the facilities during Project operations	Less than significant	None required	--
Impact CC-TRA-4: Result in potential construction impacts on traffic operation and circulation, transit service, nonmotorized transportation facilities, and emergency access	Significant	CC-TRA-1: Implement a Traffic Control Plan during construction at Cañada College	Less than significant
College of San Mateo			
3.1 Aesthetics			
Impact CSM-AES-1: Result in temporary visual impacts caused by construction activities	Significant	CSM-AES-1: Limit exterior construction activities to daylight hours at the College of San Mateo within 0.25 mile of residences CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at the College of San Mateo	Less than significant
Impact CSM-AES-2: Substantially degrade the existing visual character or quality of the site and its surroundings, including views from scenic vistas	Less than significant	None required	--
Impact CSM-AES-3: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	No impact	None required	--
Impact CSM-AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area	Significant	CSM-AES-4: Apply minimum lighting standards at the College of San Mateo	Less than significant
3.2 Air Quality and Energy			
Impact CSM-AQE-1: Conflict with or obstruct implementation of an applicable air quality plan	Less than significant	None required	--

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact CSM-AQE-2: Violate a BAAQMD air quality standard or substantially contribe to an existing or projected air quality violation during Project construction	Significant	CSM-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo CSM-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo CSM-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at the College of San Mateo CSM-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at the College of San Mateo CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at the College of San Mateo	Less than significant
Impact CSM-AQE-3: Violate a BAAQMD air quality standard or substantially contribe to an existing or projected air quality violation during Project operation	Less than significant	None required	--
Impact CSM-AQE-4: Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment	Significant	CSM-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo CSM-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo CSM-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at the College of San Mateo CSM-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at the College of San Mateo CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at the College of San Mateo	Less than significant

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact CSM-AQE-5: Expose existing sensitive receptors to substantial pollutant concentrations during construction	Significant	CSM-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NOX emissions at the College of San Mateo CSM-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at the College of San Mateo CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 Dust at the College of San Mateo CSM-AQE-6: Install filtration systems on ventilation and recirculation systems at the College of San Mateo	Significant and Unavoidable
Impact CSM-AQE-6: Create of objectionable odors affecting substantial number of people	Less than significant	None required	--
Impact CSM-AQE-7: Lead to a wasteful, inefficient, and unnecessary usage of energy	Less than significant	None required	--
3.3 Biological Resources			
Impact CSM-BIO-1: Impact special-status plant species	Significant	CSM-BIO-1: Implement special-status plant species avoidance and revegetation measures at the College of San Mateo	Less than significant
Impact CSM-BIO-2: Impact special-status bird species	Significant	CSM-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at the College of San Mateo	Less than significant
Impact CSM-BIO-3: Impact special-status bats	Significant	CSM-BIO-3: Implement fringed myotis, pallid bat, and hoary bat avoidance measures at the College of San Mateo	Less than significant
Impact CSM-BIO-4: Impact native wildlife nursery sites	Significant	CSM-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at the College of San Mateo	Less than significant
3.4 Cultural Resources			
Impact CSM-CUL-1: Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5	Less than significant	None required	--
Impact CSM-CUL-2: Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5	Significant	CSM-CUL-1: Stop work if cultural resources are encountered during ground-disturbing activities at the College of San Mateo	Less than significant
Impact CSM-CUL-3: Disturb any human remains, including those interred outside of formal cemeteries	Significant	CSM-CUL-2: Stop work if human remains are encountered during ground-disturbing activities at the College of San Mateo	Less than significant

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
3.5 Geology, Soils, and Paleontology			
Impact CSM-GEO-1: Expose people or structures to safety risks due to surface fault rupture resulting from seismic activity	Less than significant	None required	--
Impact CSM-GEO-2: Expose people or structures to strong seismically induced groundshaking	Significant	CSM-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at the College of San Mateo and comply with recommendations	Less than significant
Impact CSM-GEO-3: Expose people or structures to the effects of seismically induced ground failure, including liquefaction	Less than significant	None required	--
Impact CSM-GEO-4: Accelerate erosion during Project construction and operation	Less than significant	None required	--
Impact CSM-GEO-5: Result in loss of topsoil as a result of Project construction and operation	Significant	CSM-GEO-2: Stockpile topsoil removed during construction at the College of San Mateo and reuse stockpiled topsoil during revegetation	Less than significant
Impact CSM-GEO-6: Increase risk of landslide, liquefaction, lateral spread, subsidence, or collapse, as a result of Project location on an unstable geologic unit or soil	Less than significant	None required	--
Impact CSM-GEO-7: Increase risk of damage to Project structures as a result of Project location on expansive soils	Significant	CSM-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at the College of San Mateo and comply with recommendations	Less than significant
Impact CSM-GEO-8: Result in direct or indirect destruction of a unique paleontological resource or site or unique geologic feature	Less than significant	None required	--
3.6 Greenhouse Gases			
Impact CSM-GHG-1: Generate GHG emissions during Project construction	Significant	CSM-GHG-1: Where feasible, implement BAAQMD's best management practices for GHG emissions at College of San Mateo CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at College of San Mateo	Less than significant
Impact CSM-GHG-2: Generate GHG emissions during Project operation	Less than significant	None required	--

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact CSM-GHG-3: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases	Less than significant	None required	--
Impact CSM-GHG-4: Subject property and persons to otherwise avoidable physical harm as a result of inevitable climate change	Less than significant	None required	--
3.7 Hazards and Hazardous Materials			
Impact CSM-HAZ-1: Cause a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during Project construction or from Project operation	Significant	CSM-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at the College of San Mateo	Less than significant
Impact CSM-HAZ-2: Cause 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 during Project construction	Significant	CSM-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at the College of San Mateo CSM-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at the College of San Mateo	Less than significant
Impact CSM-HAZ-3: Cause 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 during Project operation	Less than significant	None required	--
Impact CSM-HAZ-4: Emit or involve handling of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	Significant	CSM-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at the College of San Mateo CSM-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at the College of San Mateo CSM-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at the College of San Mateo	Less than significant

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact CSM-HAZ-5: Be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5	Less than significant	None required	--
Impact CSM-HAZ-6: Interfere with adopted emergency response plan or emergency evacuation plan	Significant	CSM-TRA-1: Implement a Traffic Control Plan during construction at the College of San Mateo	Less than Significant
Impact CSM-HAZ-7: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires	Significant	CSM-HAZ-4: Comply with legal requirements for fire prevention during construction activities at the College of San Mateo CSM-HAZ-5: Create and maintain adequate firebreaks and practice fire prevention at the College of San Mateo	Less than significant
3.8 Hydrology and Water Quality			
Impact CSM-HYD-1: Violate any water quality standards or waste discharge requirements and/or otherwise substantially degrade water quality	Significant	CSM-HYD-1: Implement erosion-control measures to protect water quality during construction at the College of San Mateo CSM-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at the College of San Mateo CSM-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at the College of San Mateo CSM-HYD-2: Design and maintain hydromodification features as postconstruction measures at the College of San Mateo	Less than significant
Impact CSM-HYD-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level	Significant	CSM-HYD-2: Design and maintain hydromodification features as postconstruction measures at the College of San Mateo	Less than significant
Impact CSM-HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite	Significant	CSM-HYD-1: Implement erosion-control measures to protect water quality during construction at the College of San Mateo CSM-HYD-2: Design and maintain hydromodification features as postconstruction measures at the College of San Mateo	Less than significant

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact CSM-HYD-4: Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff	Significant	CSM-HYD-2: Design and maintain hydromodification features as postconstruction measures at the College of San Mateo	Less than significant
Impact CSM-HYD-5: Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place within a 100-year flood hazard area structures that would impede or redirect flood flows	Significant	CSM-HYD-2: Design and maintain hydromodification features as postconstruction measures at the College of San Mateo	Less than significant
Impact CSM-HYD-6: Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam	No impact	None required	--
Impact CSM-HYD-7: Contribute to inundation by seiche, tsunami, or mudflow	Less than significant	None required	--
3.9 Land Use and Planning			
Impact CSM-LUP-1: Physically divide an established community	No impact	None required	--
Impact CSM-LUP-2: Conflict with applicable land use plans, policies, or regulations	No impact	None required	--
Impact CSM-LUP-3: Conflict with any applicable habitat conservation plan or natural community conservation plan	No impact	None required	--
3.10 Noise			
Impact CSM-NOI-1: Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies	Significant	CSM-NOI-1: Employ noise-reducing construction practices at the College of San Mateo	Less than significant

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact CSM-NOI-2: Expose persons to or generate excessive groundborne vibration or groundborne noise levels	Less than significant	None required	--
Impact CSM-NOI-3: Result in a permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project	Less than significant	None required	--
Impact CSM-NOI-4: Result in a temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project	Significant	CSM-NOI-1: Employ noise-reducing construction practices at the College of San Mateo	Less than significant
Impact CSM-NOI-5: Be located within an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the Project area to excessive noise levels	No impact	None required	--
Impact CSM-NOI-6: Be located in the vicinity of a private airstrip and expose people residing or working in the Project area to excessive noise levels	No impact	None required	--
3.11 Population and Housing			
Impact CSM-POP-1: Directly induce substantial population growth due to expanding existing facilities or developing new residential units	No impact	None required	--
Impact CSM-POP-2: Indirectly induce substantial population growth due to jobs created by Project construction	Less than significant	None required	--
Impact CSM-POP-3: Displace existing housing or people, necessitating the construction of replacement housing elsewhere	No impact	None required	--

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
3.12 Public Services and Utilities			
Impact CSM-PSU-1: Reduce service ratios and response times for fire protection and police protection services during construction and operation	Less than significant	None required	--
Impact CSM-PSU-2: Increase student enrollment at schools or increase level of service required at other public facilities resulting in an adverse physical impact to these facilities	No impact	None required	--
Impact CSM-PSU-3: Substantially increase demand for water supply at the Project site during construction and operation	Less than significant	None required	--
Impact CSM-PSU-4: Increase generation of wastewater at the Project site during construction and operation	Less than significant	None required	--
Impact CSM-PSU-5: Alter stormwater drainage patterns at the Project site	Less than significant	None required	--
Impact CSM-PSU-6: Increase generation of solid waste during construction and operation	Less than significant	None required	--
Impact CSM-PSU-7: Comply with federal, state, and local statutes and regulations related to solid waste	No impact	None required	--
3.13 Recreation			
Impact CSM-REC-1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated	No impact	None required	--
Impact CSM-REC-2: Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment	Less than significant	None required	--

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
3.14 Transportation and Traffic			
Impact CSM-TRA-1: Result in a substantial increase in vehicle delay or deterioration of traffic operations during Project operations	No impact	None required	--
Impact CSM-TRA-2: Potentially conflict with transit services and facilities and policies and plans related to the services during project operations	No impact	None required	--
Impact CSM-TRA-3: Potentially conflict with local pedestrian and bicycle facilities and policies and plans regarding the facilities during project operations	No impact	None required	--
Impact CSM-TRA-4: Result in potential construction impacts on traffic operation and circulation, transit service, nonmotorized transportation facilities, and emergency access	Significant	CSM-TRA-1: Implement a Traffic Control Plan during construction at the College of San Mateo	Less than significant
Skyline College			
3.1 Aesthetics			
Impact SC-AES-1: Result in temporary visual impacts caused by construction activities	Significant	SC-AES-1: Limit exterior construction activities to daylight hours at Skyline College within 0.25 mile of residences SC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Skyline College	Less than significant
Impact SC-AES-2: Substantially degrade the existing visual character or quality of the site and its surroundings, including views from scenic vistas	Significant	SC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Skyline College SC-AES-3: Ensure new residential development blends with existing residential development at Skyline College	Less than significant
Impact SC-AES-3: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	Significant	SC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Skyline College	Less than significant
Impact SC-AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area	Significant	SC-AES-4: Apply minimum lighting standards at Skyline College	Less than significant

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
3.2 Air Quality and Energy			
Impact SC-AQE-1: Conflict with or obstruct implementation of an applicable air quality plan	Less than significant	None required	--
Impact SC-AQE-2: Violate a BAAQMD air quality standard or substantially contribute to an existing or projected air quality violation during Project construction	Significant	SC-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at Skyline College SC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Skyline College SC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Skyline College SC-AQE-4: Offset NO_X Emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at Skyline College SC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Skyline College	Less than significant
Impact SC-AQE-3: Violate a BAAQMD air quality standard or substantially contribute to an existing or projected air quality violation during Project operation	Less than significant	None required	--
Impact SC-AQE-4: Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment	Significant	SC-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at Skyline College SC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Skyline College SC-AQE-3: Utilize Clean diesel-powered equipment during construction to control construction-related DPM emissions at Skyline College SC-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at Skyline College SC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Skyline College	Less than significant
Impact SC-AQE-5: Expose existing sensitive receptors to substantial pollutant concentrations during construction	Significant	SC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Skyline College SC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Skyline College SC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Skyline College	Less than significant

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact SC-AQE-6: Create objectionable odors affecting substantial number of people	Less than significant	None required	--
Impact SC-AQE-7: Lead to a wasteful, inefficient, and unnecessary usage of energy	Less than significant	None required	--
3.3 Biological Resources			
Impact SC-BIO-1: Impact special-status plant species	Significant	SC-BIO-1: Implement special-status plant species avoidance and revegetation measures at Skyline College	Less than significant
Impact SC-BIO-2: Impact special-status bird species	Significant	SC-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at Skyline College	Less than significant
Impact SC-BIO-3: Impact special-status bats	Significant	SC-BIO-3: Implement fringed myotis, pallid bat, and hoary bat avoidance measures at Skyline College	Less than significant
Impact SC-BIO-4: Impact Mission blue butterfly	Significant	SC-BIO-4a: Conduct presence–absence survey for Mission blue butterfly at Skyline College SC-BIO-4b: Avoid impacts on Mission blue butterfly habitat during construction of the Environmental Sciences building at Skyline College SC-BIO-4c: Consult with the U.S. Fish and Wildlife Service if impacts on Mission blue butterfly habitat cannot be avoided	Less than significant
Impact SC-BIO-5: Impact California red-legged frog	Significant	SC-HYD-1: Implement erosion-control measures to protect water quality during construction at Skyline College SC-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at Skyline College	Less than significant
Impact SC-BIO-6: Impact riparian habitat or other sensitive natural communities	Less than significant	None required	--
Impact SC-BIO-7: Impact native wildlife nursery sites	Significant	SC-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at Skyline College	Less than significant
Impact SC-BIO-8: Potentially conflict with the City of San Bruno's heritage tree ordinance	Significant	SC-BIO-5: Implement tree avoidance, minimization, and replacement plan at the residential development site at Skyline College	Less than significant
3.4 Cultural Resources			
Impact SC-CUL-1: Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5	Less than significant	None required	--
Impact SC-CUL-2: Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5	Significant	SC-CUL-1: Stop work if cultural resources are encountered during ground-disturbing activities at Skyline College	Less than significant

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact SC-CUL-3: Disturb any human remains, including those interred outside of formal cemeteries	Significant	SC-CUL-2: Stop work if human remains are encountered during ground-disturbing activities at Skyline College	Less than significant
3.5 Geology, Soils, and Paleontology			
Impact SC-GEO-1: Expose people or structures to safety risks due to surface fault rupture resulting from seismic activity	Less than significant	None required	--
Impact SC-GEO-2: Expose people or structures to strong seismically induced groundshaking	Significant	SC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Skyline College and comply with recommendations	Less than significant
Impact SC-GEO-3: Increase exposure of people or structures to the effects of seismically induced ground failure, including liquefaction	Less than significant	None required	--
Impact SC-GEO-4: Accelerate erosion during Project construction and operation	Less than significant	None required	--
Impact SC-GEO-5: Result in loss of topsoil from Project construction and operation	Significant	SC-GEO-2: Stockpile topsoil removed during construction at Skyline College and reuse stockpiled topsoil during revegetation	Less than significant
Impact SC-GEO-6: Increase risk of landslide, liquefaction, lateral spread, subsidence, or collapse, as a result of Project location on an unstable geologic unit or soil	Significant	SC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Skyline College and comply with recommendations	Less than significant
Impact SC-GEO-7: Increase risk of damage to Project structures as a result of Project location on expansive soils	Significant	SC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Skyline College and comply with recommendations	Less than significant
Impact SC-GEO-8: Result in direct or indirect destruction of a unique paleontological resource or site or unique geologic feature	Significant	SC-GEO-3: Implement procedures for identifying, evaluating, and recovering paleontological resources at Skyline College	Less than significant
3.6 Greenhouse Gases			
Impact SC-GHG-1: Generate GHG emissions during Project construction	Significant	SC-GHG-1: Where feasible, implement BAAQMD's best management practices for GHG emissions at Skyline College SC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Skyline College	Less than significant

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact SC-GHG-2: Generate GHG emissions during Project operation	Less than significant	None required	--
Impact SC-GHG-3: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases	Less than significant	None required	--
Impact SC-GHG-4: Subject property and persons to otherwise avoidable physical harm as a result of inevitable climate change	Less than significant	None required	--
3.7 Hazards and Hazardous Materials			
Impact SC-HAZ-1: Cause a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during Project construction or from Project operation	Significant	SC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Skyline College	Less than significant
Impact SC-HAZ-2: Cause 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 during Project construction	Significant	SC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Skyline College SC-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at Skyline College	Less than significant
Impact SC-HAZ-3: Cause 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 during Project operation	Less than Significant	None required	--
Impact SC-HAZ-4: Emit or involve handling of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	Significant	SC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Skyline College SC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Skyline College SC-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at Skyline College	Less than significant

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact SC-HAZ-5: Be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5	Less than significant	None required	--
Impact SC-HAZ-6: Interfere with adopted emergency response plan or emergency evacuation plan	Significant	SC-TRA-1: Implement a Traffic Control Plan during construction at Skyline College	Less than significant
Impact SC-HAZ-7: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires	Significant	SC-HAZ-4: Comply with legal requirements for fire prevention during construction activities at Skyline College SC-HAZ-5: Create and maintain adequate firebreaks and practice fire prevention at Skyline College	Less than significant
3.8 Hydrology and Water Quality			
Impact SC-HYD-1: Violate any water quality standards or waste discharge requirements and/or otherwise substantially degrade water quality	Significant	SC-HYD-1: Implement erosion-control measures to protect water quality during construction at Skyline College SC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Skyline College SC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Skyline College SC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Skyline College	Less than significant
Impact SC-HYD-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level	Significant	SC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Skyline College	Less than significant
Impact SC-HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite	Significant	SC-HYD-1: Implement erosion-control measures to protect water quality during construction at Skyline College SC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Skyline College	Less than significant

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact SC-HYD-4: Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff	Significant	SC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Skyline College	Less than significant
Impact SC-HYD-5: Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place within a 100-year flood hazard area structures that would impede or redirect flood flows	Significant	SC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Skyline College	Less than significant
Impact SC-HYD-6: Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam	No impact	None required	--
Impact SC-HYD-7: Contribute to inundation by seiche, tsunami, or mudflow	Less than significant	None required	--
3.9 Land Use and Planning			
Impact SC-LUP-1: Physically divide an established community	No impact	None required	--
Impact SC-LUP-2: Conflict with applicable land use plans, policies, or regulations	Significant	SC-LUP-1: Rezone Surplus Parcel B and amend the general plan land use designation to permit R-3 dwellings at Skyline College	Less than significant
Impact SC-LUP-3: Conflict with any applicable habitat conservation plan or natural community conservation plan	No impact	None required	--
3.10 Noise			
Impact SC-NOI-1: Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies	Significant	SC-NOI-1: Employ noise-reducing construction practices at Skyline College SC-NOI-2: Prepare a detailed noise reduction analysis at the potential housing development at Skyline College	Less than significant

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact SC-NOI-2: Expose persons to or generate excessive groundborne vibration or groundborne noise levels	Less than significant	None required	--
Impact SC-NOI-3: Result in a permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project	Less than significant	None required	--
Impact SC-NOI-4: Result in a temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project	Significant	SC-NOI-1: Employ noise-reducing construction practices at Skyline College	Less than significant
Impact SC-NOI-5: Be located within an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the Project area to excessive noise levels	No impact	None required	--
Impact SC-NOI-6: Be located in the vicinity of a private airstrip and expose people residing or working in the Project area to excessive noise levels	No impact	None required	--
3.11 Population and Housing			
Impact SC-POP-1: Directly induce substantial population growth due to expanding existing facilities or developing new residential units	Less than significant	None required	--
Impact SC-POP-2: Indirectly induce substantial population growth due to jobs created by Project construction	Less than significant	None required	--
Impact SC-POP-3: Displace existing housing or people, necessitating the construction of replacement housing elsewhere	No impact	None required	--

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
3.12 Public Services and Utilities			
Impact SC-PSU-1: Reduce service ratios and response times for fire protection and police protection services during construction and operation	Significant	SC-PSU-1: Pay the fire and police services development impact fee to the City of San Bruno for Skyline College	Less than significant
Impact SC-PSU-2: Increase student enrollment at schools or increase level of service required at other public facilities resulting in an adverse physical impact to these facilities	Significant	SC-PSU-2: Pay the San Bruno Park Elementary School District and San Mateo Union High School District school impact fees for Skyline College	Less than significant
Impact SC-PSU-3: Increase demand for water supply at the Project site during construction and operation	Significant	SC-PSU-3: Assess the capacity of the City's water and wastewater system infrastructure and pay the capacity fees for Skyline College	Less than significant
Impact SC-PSU-4: Increase generation of wastewater at the Project site	Significant	SC-PSU-3: Assess the capacity of the City's water and wastewater system infrastructure and pay the capacity fees for Skyline College	Less than significant
Impact SC-PSU-5: Alter stormwater drainage patterns at the Project site requiring the construction of new stormwater drainage facilities or expansion of existing facilities	Less than significant	None required	--
Impact SC-PSU-6: Increase generation of solid waste during construction and operation	Less than significant	None required	--
Impact SC-PSU-7: Comply with federal, state, and local statutes and regulations related to solid waste	No impact	None required	--
3.13 Recreation			
Impact SC-REC-1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated	Significant	SC-REC-1: Dedicate parkland and/or pay in-lieu fees to City of San Bruno for residential development at Skyline College	Less than significant
Impact SC-REC-2: Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment	Less than significant	None required	--

Impact	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
3.14 Transportation and Traffic			
Impact SC-TRA-1: Result in a substantial increase in vehicle delay or deterioration of traffic operations during Project operations	Less than significant	None required	--
Impact SC-TRA-2: Potentially conflict with transit services and facilities and policies and plans related to the services during project operations	Less than significant	None required	--
Impact SC-TRA-3: Potentially conflict with local pedestrian and bicycle facilities and policies and plans regarding the facilities during Project operations	Less than significant	None required	--
Impact SC-TRA-4: Result in potential construction impacts on traffic operation and circulation, transit service, nonmotorized transportation facilities, and emergency access	Significant	SC-TRA-1: Implement a Traffic Control Plan during construction at Skyline College	Less than significant

Table ES-5. Comparison of Project Alternatives to the Project

	Alternative 1: No Project	CC-Alternative 2	CSM-Alternative 2	SC-Alternative 3
Aesthetics	Less	Less	Same	Same
Air Quality and Energy	Less	Less	Less	Less
Biological Resources	Less	Same	Same	Same
Cultural Resources	Less	Same	Same	Same
Geology and Soils	Less	Same	Same	Same
Greenhouse Gas Emissions	Less	Less	Less	Less
Hazards and Hazardous Materials	Less	Same	Same	Same
Hydrology and Water Quality	Less	Less	Same	Same
Land Use and Planning	Less	Same	Same	Less
Noise	Less	Same	Same	Less
Population and Housing	Less	Same	Same	Less
Public Services and Utilities	Less	Less	Same	Less
Transportation and Traffic	Less	Less	Same[a]	Less
Cumulative Impacts	Less	Less	Less	Less

Notes:

[a] With implementation of **Mitigation Measure CSM-ALT-2**, described in Chapter 5, *Alternatives*.

Chapter 1
Introduction

1.1 Project Overview and Background

The College of San Mateo opened in 1922. San Mateo County Community College District (District) is a local government agency and operates under a locally-elected Board of Trustees and receives policy guidance from the State Community College Chancellor's office.

In 1999, the District's Facilities Planning and Operations Department initiated a facilities master plan process to assess the condition of the District's physical environment and to identify needs for repair, renovation, and new construction projects required to support the current and future instructional needs of its three community colleges—Cañada College, College of San Mateo (CSM), and Skyline College. As a result, the District prepared the *2001 Educational Facilities Master Plan* and subsequently implemented facility improvements identified in the plan. In August 2006, as an update to the *2001 Educational Facilities Master Plan*, the District adopted the *2006 Facilities Master Plan* and subsequently implemented facility improvements identified in the plan.

In January 2015, the District Board of Trustees approved the *2015 Facilities Master Plan Amendment* (Project). The *2015 Facilities Master Plan Amendment* identifies planned improvements at each of the District's three campuses to continue the modernization and renovation work that began with adoption of the District's 2001 and 2006 facilities master plans. The improvements at each of the campuses include building modernization and renovation; building demolition and new building construction; landscape, hardscape and pedestrian walkway improvements; parking expansion/reconfiguration and roadway modifications; and renewable energy and water conserving installations. A detailed description of the Project is provided in Chapter 2, *Project Description*.

This document is in compliance with the California Environmental Quality Act (CEQA). The District is the CEQA lead agency for the Project and has prepared this Environmental Impact Report (EIR) to evaluate potential impacts and identify required mitigation to avoid or reduce potentially significant impacts.

1.2 Environmental Review Process

1.2.1 California Environmental Quality Act

CEQA applies to all discretionary activities proposed to be implemented by California public agencies, including state, regional, county, and local agencies (California Public Resources Code [PRC] Section 21000 et seq.). CEQA requires agencies to estimate and evaluate the environmental impacts of their actions, avoid or reduce significant environmental impacts when feasible, and to consider the environmental implications of their actions prior to making a decision. CEQA also requires agencies to inform the public and other relevant agencies of proposed actions and consider their comments in the evaluation and decision-making process. The State CEQA Guidelines are the primary source of rules and interpretation of CEQA (PRC sections 21000 et seq.; 14 CCR 15000 et seq.).

One of the purposes of CEQA is to establish opportunities for the public and relevant agencies to review and comment on projects that might affect the environment. CEQA requires an agency to invite public participation through publication of the Notice of Preparation (NOP) as part of the EIR scoping process. Public participation is also achieved by notice and review of the Draft EIR whereby the public and agencies have 45 days to review the EIR and submit written comments. The public review period for this Draft EIR is from August 31, 2015 to October 15, 2015.

1.2.2 Purpose of EIR

The purpose of this EIR is to provide the information necessary for the District's Board of Trustees to make an informed decision about the Project and to supply the information necessary to support related permit applications and review processes.

This Draft EIR has been prepared in compliance with CEQA to achieve the following goals.

- Identify potential direct, indirect, and cumulative environmental impacts associated with the Project.
- Describe feasible mitigation measures intended to avoid or reduce potentially significant impacts to a less-than-significant level.
- Disclose the environmental analysis, including the potential Project impacts and proposed mitigation measures, for public and agency review and comment.
- Discuss potential alternatives to the Project that avoid or reduce identified significant Project impacts.

Once the public review period is complete, the District will prepare a Final EIR to include all the comments received on the Draft EIR that relate to environmental issues, responses to those comments, and any necessary revisions to the Draft EIR. CEQA requires the District's decision-making body to review and consider the information in the EIR before making a decision on the Project.

1.3 Scope and Content of EIR

Scoping refers to the process used to assist the lead agency in determining the focus and content of an EIR. Scoping solicits input on the potential topics to be addressed in an EIR, the range of project alternatives, and possible mitigation measures. Scoping is also helpful in establishing methods of assessment and in selecting the environmental effects to be considered in detail.

1.3.1 Notice of Preparation

The scoping process for this EIR was formally initiated on May 5, 2015, when the District submitted the NOP to the California State Clearinghouse for distribution to state agencies and to the San Mateo County Clerk for public posting. Additionally, the NOP was sent to the cities and town in which the campuses are located: Redwood City, Town of Woodside, San Mateo, and San Bruno. The purpose of the NOP is to solicit participation from relevant agencies and from the public in determining the scope of an EIR. The scoping period ended on June 8, 2015.

Written comments received during the scoping process are on file at the District's main office (3401 CSM Drive, San Mateo, CA) and provided in **Appendix A**.

1.3.2 Resource Topics

Consistent with Appendix G of the State CEQA Guidelines, this Draft EIR evaluates the potential impacts of the Project on the following resource areas.

- Section 3.1, *Aesthetics*
- Section 3.2, *Air Quality and Energy*
- Section 3.3, *Biological Resources*
- Section 3.4, *Cultural Resources*
- Section 3.5, *Geology, Soils, and Paleontology*
- Section 3.6, *Greenhouse Gas Emissions*
- Section 3.7, *Hazards and Hazardous Materials*
- Section 3.8, *Hydrology and Water Quality*
- Section 3.9, *Land Use and Planning*
- Section 3.10, *Noise*
- Section 3.11, *Population and Housing*
- Section 3.12, *Public Services and Utilities*
- Section 3.13, *Recreation*
- Section 3.14, *Transportation and Traffic*

The following topics are also analyzed in this Draft EIR.

- Section 4.1, *Cumulative Impacts*
- Section 4.2, *Significant Unavoidable Impacts*
- Section 4.3, *Significant Irreversible Changes in the Environment*
- Section 4.4, *Growth Inducement*
- Chapter 5, *Alternatives*

Although agricultural and mineral resources are identified in Appendix G of the State CEQA Guidelines, this EIR analysis does not include these topics because there would be no impact, as described below.

- **Agricultural Resources**. There are no farmlands within or near any of the campuses that would be affected by the Project. There are no prime farmlands or farmland of statewide importance within Redwood City, Woodside, San Mateo, or San Bruno. Therefore, there would be no impact on agricultural resources.
- **Mineral Resources**. The general plans for each city or town do not identify mineral resources within the area, and there are no known mineral resources at the campuses. The proposed Project would not result in the loss of availability of known mineral resources of regional or statewide importance. Therefore, there would be no impact on mineral resources.

1.4 EIR Organization

This Draft EIR is organized as described below.

- Chapter 1, *Introduction*, includes a brief overview of the Project; an overview of the environmental review process; and the scope, content, and organization of the Draft EIR.
- Chapter 2, *Project Description*, includes a comprehensive description of the Project.
- Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures*, includes an evaluation of the resource topics outlined in Section 1.3.2. Each resource-specific section discusses the environmental setting, impacts, and mitigation measures.
- Chapter 4, *Other CEQA-Required Discussions*, includes a discussion of cumulative impacts, significant and unavoidable impacts, and growth-inducing impacts.
- Chapter 5, *Alternatives*, includes a description of the Project alternatives considered and evaluated.
- Chapter 6, *List of Preparers*, includes a list of staff who contributed to preparation of the EIR.
- Chapter 7, *References*, includes a list of the printed references and personal communications cited in the EIR.
- Appendices
    A. NOP and Scoping Comments
    B. Air Quality and Greenhouse Gas Analysis Calculations
    C. Biological Resources Documentation
    D. Cultural Resources Background Information and Documentation
    E. Transportation and Traffic Calculations

Chapter 2
Project Description

2.1 Project Overview

In January 2015, the Board of Trustees of the San Mateo County Community College District (District) approved the *2015 Facilities Master Plan Amendment* (Project). The plan amendment identifies planned improvements at each of the District's three campuses—Cañada College, College of San Mateo (CSM), and Skyline College—to continue the modernization and renovation work that began with adoption of the District's 2001 and 2006 facilities master plans. The improvements at each of the campuses include building modernization and renovation; building demolition and new building construction; landscape, hardscape and pedestrian walkway improvements; parking expansion/ reconfiguration and roadway modifications; and renewable energy and water conserving installations.

2.2 Project Objectives

Section 15124(b) of the CEQA Guidelines requires that the project description within an EIR include a statement of the project objectives. The District has identified the following objectives for the Project.

To better serve approximately the same number of current students and staff at each campus and to prepare students for universities and high-demand jobs, the District plans to provide modern facilities and technology for the foreseeable future; improve access for disabled students; ensure classrooms meet earthquake, fire and safety requirements; replace aging infrastructure with energy efficient systems; improve pedestrian flow between buildings, make landscape and hardscape improvements, and better align parking lots and roadways.

2.3 Project Location

The District has three campuses in San Mateo County, California: Cañada College in Redwood City and Woodside, CSM in San Mateo, and Skyline College in San Bruno. **Figure 2-1** shows the regional locations of each of the three campuses. A more detailed description of the location of each campus is presented in Section 2.4, *Proposed Project*.

2.4 Proposed Project

The Project includes proposed improvements at each of the District's three campuses, as described in the *2015 Facilities Master Plan Amendment*. At this time, the majority of the improvements are conceptual only, with the exception of the new Building 1, Kinesiology/Wellness, at Cañada College, which has a schematic design plan (refer to Section 2.4.1, *Cañada College*). The specific design and construction of other campus projects would occur as projects are funded through the District's Capital Improvement Program (CIP) schedule. Similarly, schedule assumptions contained in this

document are conceptual and will be refined as project designs evolve. For that reason, this EIR considers a conservative or "worst-case" scenario when analyzing most improvements (e.g., larger footprint and scale than what may actually be built). The locations of proposed improvements at each campus are shown in **Figures 2-2** through **2-4**.

The improvements, except as noted below, are being undertaken to modernize the campus facilities to facilitate modern teaching and education approaches, improve accessibility, and improve energy efficiency. As a result, in general, the Project would not facilitate or cause increases in enrollment or employment, nor contribute to campus growth, because the existing facilities adequately serve the current and anticipated student enrollment and District employment. Enrollment at the three campuses has stabilized and is not based on the size or condition of campus buildings. The overarching purpose of the proposed improvements, including increasing building square footage, is to better serve approximately the same number of current students and staff at each campus with modern facilities and technology for the foreseeable future. Therefore, increasing the building square footage or size of parking areas to improve functionality is not expected to result in increased enrollment or campus employment.

However, there are two components of the Project that would increase use of a specific campus facility and area of a campus. On the Cañada College campus, the new Building 1, Kinesiology/Wellness, would be open to public memberships, in addition to use by students, staff, and faculty. At Skyline College, a new residential complex would include multi-family housing for staff and faculty and could include single-family housing available to the general public. These two components are described in more detail in Section 2.4.1, *Cañada College*, and Section 2.4.3, *Skyline College*, respectively.

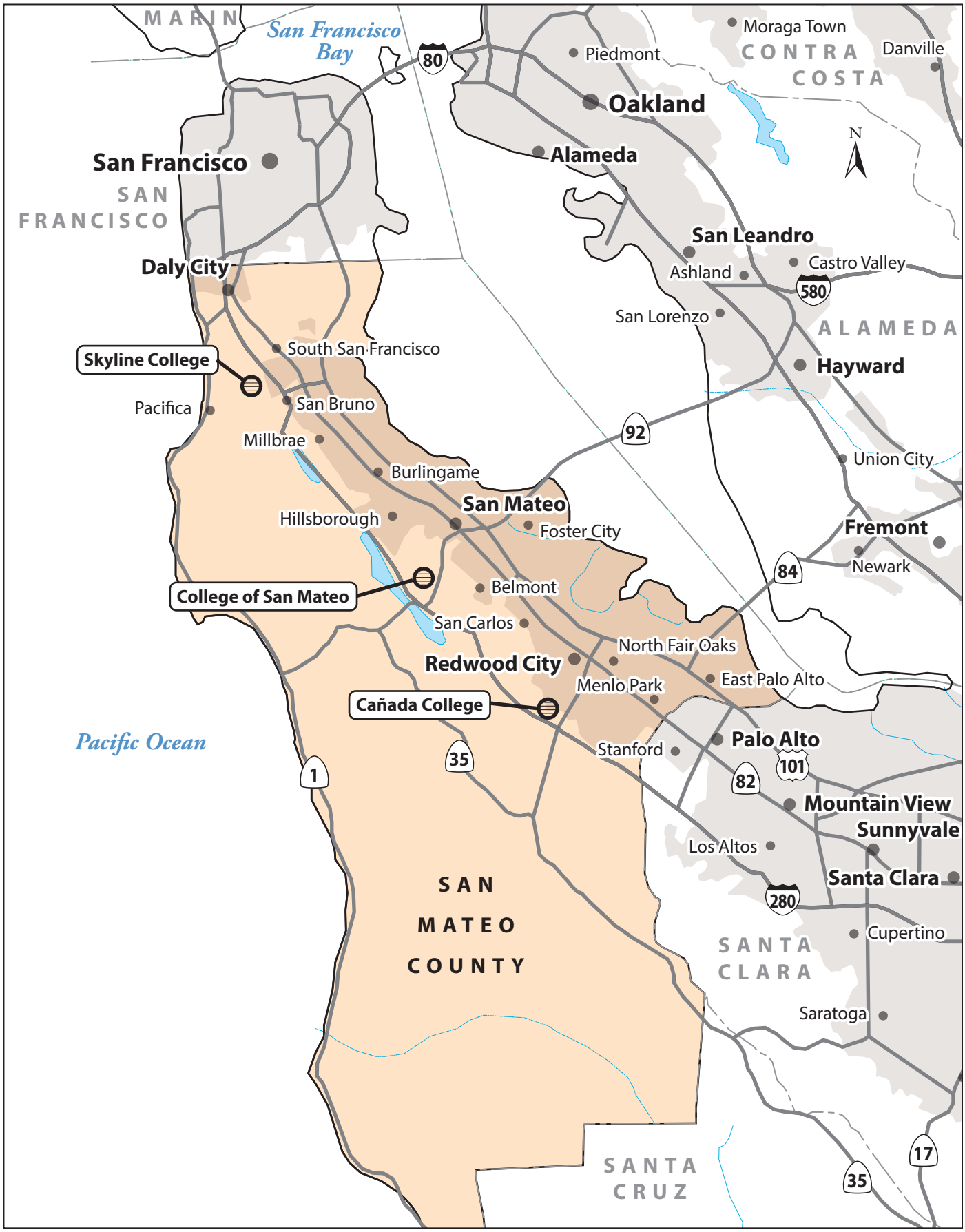
2.4.1 Cañada College

2.4.1.1 Location and Setting

The Cañada College campus is approximately 124 acres in area and is located in the foothills in the southern part of San Mateo County. The campus boundaries fall within both Redwood City and Woodside. The existing main entrances to the college are the main entrance via Farm Hill Boulevard on the east side of campus and the back entrance via Cañada Road on the west side of campus. Regional access to the college is via Interstate 280 (I-280), which extends north–south, less than 0.25 miles west of the campus.

The topography of the campus is relatively hilly. The campus sits back and atop a hill above the surrounding valleys. The campus core is developed with classrooms and operations buildings, paved parking lots and roads, landscaped areas, pedestrian walkways, faculty and staff housing, and athletic facilities. The campus is moderately landscaped with mature trees, lawns, and large sports fields. The campus includes some undeveloped land, including densely wooded slopes on the east and west sides, below the campus core. Prominent views from the campus core include the San Francisco Bay and Oakland Hills to the north and east, the Diablo Range across the San Francisco Bay to the southeast, and the foothills of southern San Mateo County to the west.

Adjacent land uses include undeveloped hillside land, single-family homes and multi-family dwellings and the Emerald Hills Golf Course to the north; campus athletic fields to the southeast; I-280 to the southwest; and single- and multi-family dwellings and Farm Hill Boulevard to the south and east.



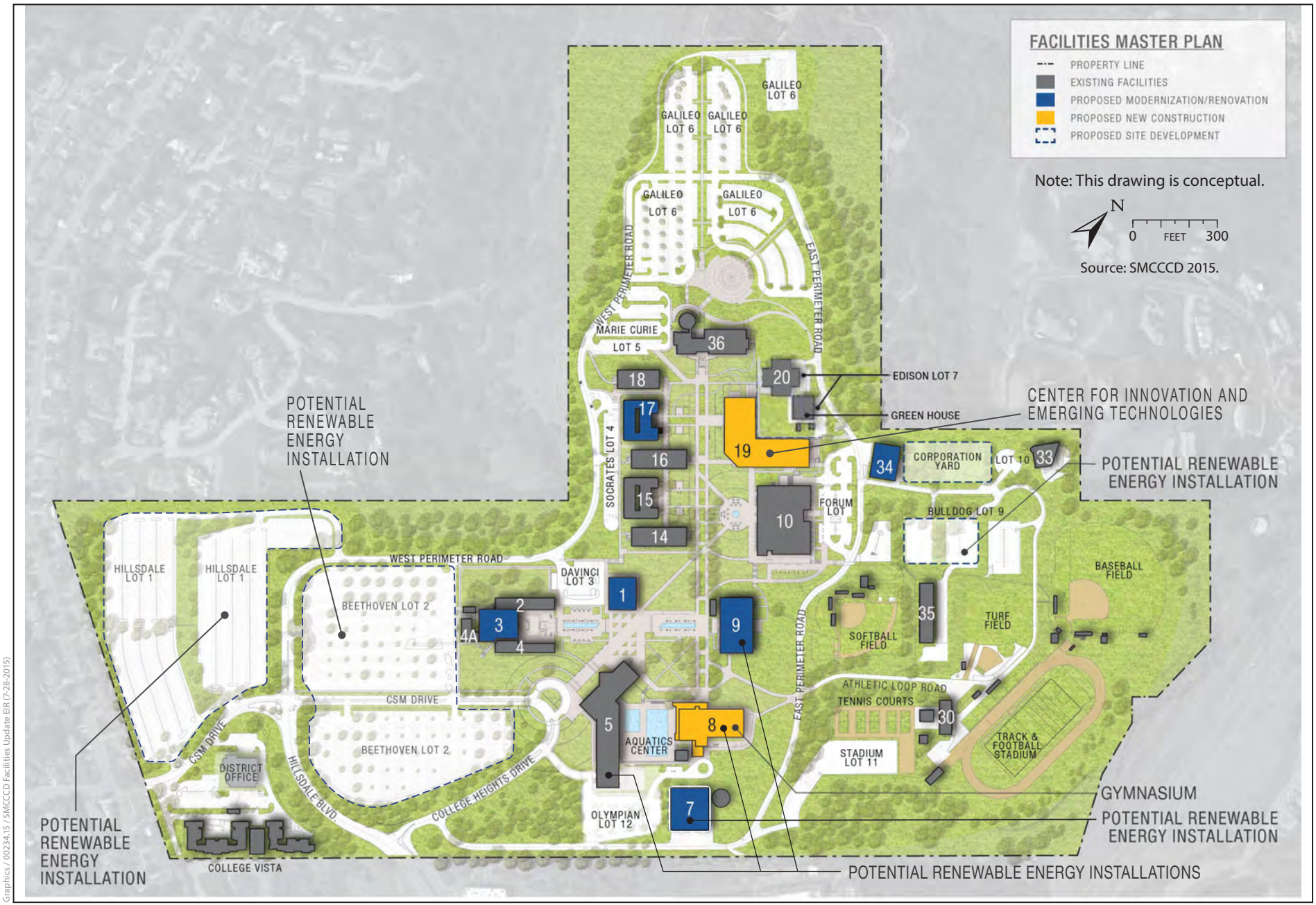
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Figure 2-1
Regional Location of Cañada College, College of San Mateo, and Skyline College Campuses



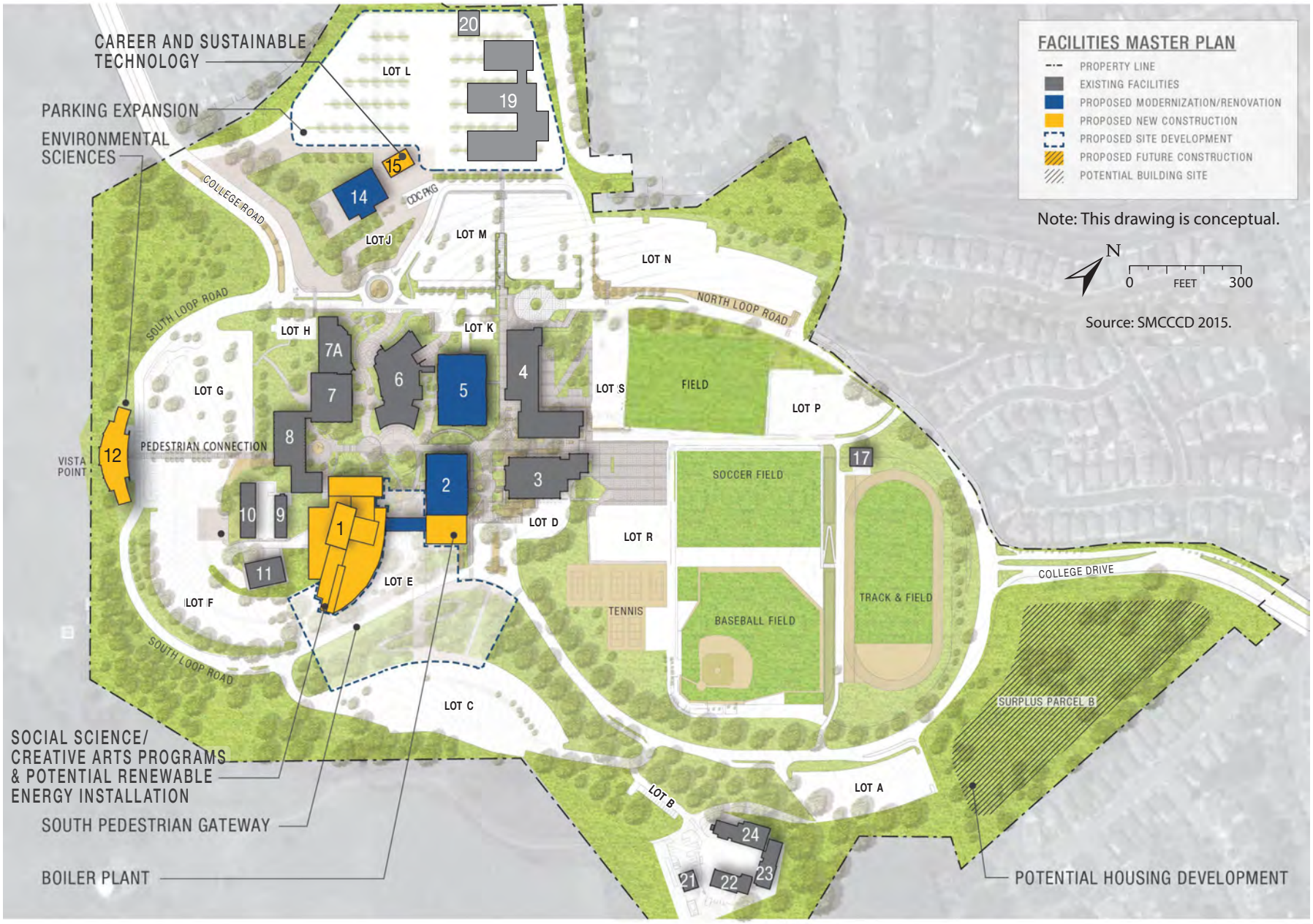
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Figure 2-2
Proposed Improvements at Cañada College



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Figure 2-3
Proposed Improvements at College of San Mateo



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Figure 2-4
Proposed Improvements at Skyline College

2.4.1.2 Proposed Facility Improvements

Proposed facility improvements at Cañada College include new building construction, modernization and renovation of existing facilities, pedestrian improvements, parking lot expansion, and potential renewable energy installations. Construction of the new Building 1 requires the demolition of the existing Building 1. Following completion of all proposed facility improvements, the campus' perimeter road would be repaired and repaved as needed. A summary of the proposed facility improvements is shown in **Table 2-1**, and described in detail below. The location of each of the improvements is shown in **Figure 2-2.**

Table 2-1. Proposed Facilities Improvements at Cañada College

Proposed Improvement	Facility	Approximate Size
Building Demolition	• Building 1, Gymnasium	39,000 sf
New Building Construction	• Building 1, Kinesiology/Wellness	85,000 sf
	• Building 23, Math/Science/Engineering	55,000 sf
Modernization and Renovation	• Building 3, Performing Arts Center • Building 9, Library/Student Resource Center • Building 13, Multi-Disciplinary Instructional Center • Building 16, Instructional Building • Building 18, Instructional Building	--[a]
Pedestrian Improvements	• North Quad development, between existing Buildings 17 and 22	50,000 sf [b]
Parking Lot Expansion	• Lot 6	325 parking spaces
	• Lot 10	150–200 parking spaces
Potential Renewable Energy Installations	• Building 1, Kinesiology/Wellness	30 kwh/sf/yr (maximum)
	• Building 23, Math/Science/Engineering	30 kwh/sf/yr (maximum)

Notes:

[a] Modernization and renovation could include interior and exterior improvements, but the overall building structures and size would not change.

[b] The size of the pedestrian improvements is unknown at this time but is estimated to be within the currently paved or disturbed area of 50,000 sf based on the area shown in **Figure 2-2**.

sf = square feet

kwh/sf/yr = kilowatt-hours per square foot per year

New Building Construction

Building 1, Kinesiology/Wellness

The Project would involve demolition of the existing Building 1, Gymnasium. The existing Building 1 was built in 1972, is approximately 39,500 sf, and contains hazardous materials (e.g., asbestos and lead paint) from its original construction. The existing gymnasium is not open for public use and is primarily used for instructional purposes. Occasionally, the gym is used by high school teams and community organizations.

The new Building 1, Kinesiology/Wellness, would be a two-story, approximately 85,000-sf structure. Building features would include water reclamation equipment and infrastructure. The existing asphalt walking track to the east of the building would be removed, and two 25-meter swimming pools (a competition pool [for daytime competition-use only] and a warm-up pool) would be installed. The pools would be surrounded by pool deck paving, and there would be new safety lighting. There would be a set of bleachers with capacity for approximately 250 spectators on the east side of the competition pool. Behind the bleachers, there would be a pool equipment building. There would be a second pool equipment and aquatics services building on the north side of the warm-up pool. There would be a retaining wall with varying heights around the north and east sides of the pool area.

A paved plaza and walkway would lead to a plaza on the north side of the building. A sidewalk would extend around the building from the north plaza to a second plaza and main entrance on the west side of the building. The building would be situated on a hill such that the entrance on the west side would open into the lower level. The pool area would be accessed from the lower level.

A service road would run along the south side of Building 1 and the pool deck. There would be a hammerhead turn-around at the east end of the service road to meet Woodside Fire Protection District standards.

In addition to supporting classroom uses, the new Building 1 would have a health club. The health club and the pools would be open to public memberships, in addition to use by students, staff, and faculty. Including faculty, staff, students, and members of the public, it is anticipated that approximately 6,000 members could use facilities in Building 1.

Building 23, Math/Science/Engineering

The Project would involve construction of a new Building 23, Math/Science/Engineering, near the existing Building 22 at the northwest end of campus. This building is anticipated to be a three-story, approximately 55,000-square-foot (sf) structure. The new building would replace the existing math and science functions on campus; because operation of the building would be the same, no additional hazardous materials would result.

There are three location options for this proposed building (**Figure 2-2**). Option 1 is on the west side of Building 22, south of Campus Circle and east of the existing fire lane. This site has both paved and landscaped areas. Option 2 is on the east side of Building 22, south of Campus Circle. This site is an existing landscaped area that is relatively flat, close to Building 22, and slopes up to the east. Option 3 is on the southeast side of Building 22 in the mostly flat, paved area at the north end of the North Quad area.

Under any of the three options, the North Quad area, located southeast of Building 22 and northeast of Building 17, would be redeveloped (refer to *Pedestrian Improvements*).

Modernization and Renovation

Five of the existing buildings on the campus would be modernized and renovated, as described below. The total building size would remain the same for all five buildings.

Building 3, Performing Arts Center

Building 3 is located to the southeast of the Main Quad. Renovations would include internal reconfiguration to support academic needs, provide additional classroom space, and create an improved teaching and learning environment, addressing building code issues, increasing energy efficiency, enhancing safety and security, modernizing climate controls to improve indoor air quality, renovating restrooms, and addressing Americans with Disabilities Act (ADA) accessibility issues.

Building 9, Library/Student Resource Center

Building 9 is located to the northeast of the Main Quad. Renovations would include internal reconfiguration to support academic needs and a new west-side entrance, addressing building code issues, increasing energy efficiency, enhancing safety and security, modernizing climate controls to improve indoor air quality, renovating restrooms, and addressing ADA accessibility issues.

Building 13, Multi-Disciplinary Instructional Center

Building 13 is located on the southwest side of the Main Quad, across from Building 9. Renovations would include internal reconfiguration to address instructional needs and potential reconfiguration of building entrances, addressing building code issues, enhancing safety and security, increasing energy efficiency, modernizing climate controls to improve indoor air quality, renovating restrooms, and addressing ADA accessibility issues.

Buildings 16 and 18, Instructional Buildings

Buildings 16 and 18 are located on the southwest and northeast sides of Building 17, respectively. Some of the existing programs in these buildings would be relocated to the new Building 23, Math/Science/Engineering, and the buildings would be renovated for use as general classrooms and laboratories, addressing building code issues, enhancing safety and security, increasing energy efficiency, modernizing climate controls to improve indoor air quality, renovating restrooms, and addressing ADA accessibility issues.

Pedestrian Improvements

The existing North Quad, located between Buildings 17 and 22, would be redeveloped to improve pedestrian circulation and connection to the Main Quad, southeast of Building 17. The North Quad would be designed to support the adjacent buildings, to create additional outdoor space, and to connect pedestrian circulation to the rest of the campus. Building 22 would be retained, but the existing berm and the existing utilities enclosure to the south of Building 22 would be removed. The North Quad area to be redeveloped is approximately 50,000 sf. However, if Option 3 is selected for the location of the new Building 23, Math/Science/Engineering, the North Quad would be reduced in size to approximately 25,000 sf.

Parking Lot Expansion

Two parking lots at Cañada College would be expanded: Lot 6 and Lot 10.

Lot 6

Lot 6 is located in the southwest quadrant of campus and currently has approximately 558 parking spaces. This expansion would include up to 325 new parking spaces south of the existing lot, an area currently used for overflow parking and contractor staging. Because there is an existing 7.5% slope in this area, a retaining wall would be installed in the center of the new lot expansion to help reduce the slope of the parking areas. New light-emitting diode (LED) lighting would be installed throughout the new parking lot expansion, where no lighting currently exists, and stormwater retention and filtration structure(s) would be installed to ensure a net zero increase in runoff.

Lot 10

Lot 10 is located in the northwest quadrant of campus and currently has 20 parking spaces. This expansion would include approximately 150 to 200 new parking spaces to the west of the existing lot, an area currently used for overflow parking and contractor staging. LED lighting would be installed throughout the parking lot expansion, where no lighting currently exists, and stormwater retention and filtration structure(s) would be installed to ensure net zero runoff. Temporary Buildings 19, 20, and 21 would be demolished to accommodate this parking expansion. Each of these buildings is approximately 1,920 sf.

Potential Renewable Energy Installations

The Project could include renewable energy installations such as photovoltaic (PV), solar thermal, or cogeneration (i.e., combined heat and power). The renewable energy installations would be located at the new Building 1, Kinesiology/Wellness, and/or the new Building 23, Math/Science/Engineering. The renewable energy installations would be located within building structures or enclosures, ground-mounted, or on the roofs of the buildings. The District will coordinate with the Woodside Fire Protection District during the design phase to ensure the design meets fire department standards as well as other applicable codes and standards.

2.4.2 College of San Mateo

2.4.2.1 Location and Setting

The CSM campus is approximately 150 acres in area and is located on a hilltop in San Mateo. Regional access is from State Route (SR) 92 on the south side of campus. The existing main entrance to the college is via Hillsdale Boulevard on the south side of campus. SR 92 extends east to west on the south side of campus.

The topography of the campus is relatively hilly. The campus core is developed with classrooms and operations buildings, paved parking lots and roads, landscaped areas, pedestrian walkways, athletic facilities, and faculty housing. The District's Administrative office is also located on this campus. The campus is landscaped with mature trees, shrubs, and large sports fields. The campus also includes some undeveloped land. Prominent views of the San Francisco Bay and Hillsborough Hills are available from the north, northeastern, and northwestern edges of campus.

Adjacent land uses include single-family residences nearby on the west side of campus; residences farther on the north and northwest side of campus; and the Hillsdale Boulevard/SR 92 interchange and commercial and multi-family development on the south side of campus.

2.4.2.2 Proposed Facility Improvements

Proposed facility improvements at CSM include new building construction, modernization and renovation of existing facilities, potential renewable energy installations, roadway repair and resurfacing, pedestrian paths, and landscape and hardscape improvements. Construction of the new Building 8, Gymnasium, and Building 19, Center for Innovation and Emerging Technologies, requires the demolition of the existing Buildings 8, 12, and 19. Following completion of all proposed facility improvements, the campus' perimeter road would be repaired and repaved as needed. A summary of the proposed facility improvements is shown in **Table 2-2**, and described in detail below. The location of each of the improvements is shown in **Figure 2-3.**

Table 2-2. Proposed Facilities Improvements at College of San Mateo

Proposed Improvement	Facility	Approximate Size
Building Demolition	• Building 8, Gymnasium	56,000 sf
	• Building 12, East Hall	22,376 sf
	• Building 19, Emerging Technologies	30,856 sf
New Building Construction	• Building 8, Gymnasium	75,000–80,000 sf
	• Building 19, Center for Innovation and Emerging Technologies	53,250 sf
Modernization and Renovation	• Building 1, Public Safety/Multi-Disciplinary	--[a]
	• Building 3, Humanities/Arts	
	• Building 7, Facilities Maintenance Center	
	• Building 9, Library/KCSM Television and Radio	
	• Building 17, Student Support Services	
	• Building 34, Fire Science/Information Technology Services Management	
	• Corporation Yard	
Potential Renewable Energy Installations	• Lots 1, 2, and/or 9 (solar)	30 kwh/sf/yr (maximum)
	• Building 7, Facilities Maintenance Center (cogeneration)	30 kwh/sf/yr (maximum)
	• Buildings 5 and 8 (solar and/or solar thermal)	30 kwh/sf/yr (maximum)
	• Building 9 (Potential vertical axis turbine adjacent to Building 9)	30 kwh/sf/yr (maximum)

Notes:

[a] Modernization and renovation could include interior and exterior improvements, but the overall building structures and size would not change.

sf = square feet

kwh/sf/yr = kilowatt-hours per square foot per year

New Building Construction

Building 8, Gymnasium

The Project would involve demolition of the existing Building 8, Gymnasium. The existing Building 8 was built in 1964, is two stories high, approximately 56,000 sf, and contains hazardous materials (e.g., asbestos and lead paint) from its original construction. Building 8 is being replaced because it no longer serves current teaching functions and instruction methods and is not compliant with current accessibility and seismic codes.

The new Building 8, Gymnasium, would be located on approximately the same footprint as the existing building and is expected to be approximately two stories and 75,000 to 80,000 sf. The building height is not expected to exceed 60 feet above ground floor level.

Building 19, Center for Innovation and Emerging Technologies

The Project would involve demolition of existing Buildings 12, East Hall, and 19, Emerging Technologies. The existing Buildings 12 and 19 are each 2 stories high, approximately 22,376 sf and 30,856 sf, respectively. The buildings contain hazardous materials (e.g., asbestos and lead paint) from their original construction and are being replaced because they no longer serve current teaching functions and instruction methods and are not compliant with current accessibility and seismic codes.

The new Building 19, Center for Innovation and Emerging Technologies, would be L-shaped and located on approximately the same footprint as the existing Buildings 12 and 19. The new Building 19 would be up to three stories (depending on the layout) and 53,250 sf. There would be no changes to Buildings 20, Horticulture, 20A, Greenhouse, or Edison Lot 7.

Modernization and Renovation

Six of the existing buildings on the campus, and the corporation yard, would be modernized and renovated, as described below.

Building 1, Public Safety/Multi-Disciplinary

Building 1 is located northeast of Da Vinci Lot 3, near the center of campus. Renovations would include implementing modernization to address building code issues, enhancing safety and security, increasing utility efficiencies, modernizing climate controls to improve indoor air quality, renovating restrooms, and addressing ADA accessibility issues.

Building 3, Humanities/Arts

Building 3 is located adjacent to Buildings 2, 4, and 4A, between West Perimeter Road and CSM Drive. The Project would complete the modernization and renovation of Building 3, which has undergone partial renovations over several decades. Renovations would include internal reconfiguration, the introduction of smart classroom technologies, addressing building code issues, enhancing safety and security, increasing utility efficiencies, modernizing climate controls to improve indoor air quality, renovating restrooms, and addressing ADA accessibility issues.

Building 7, Facilities Maintenance Center

Building 7 is located between Building 8 and East Perimeter Road in the south-central portion of campus. Building 7 is almost 50 years old, in disrepair, and unsuitable for administrative use. The administrative functions currently housed in the existing Facilities Maintenance Center would be relocated to Building 34, and the vacated space in the Facilities Maintenance Center would be repurposed for additional maintenance shops and storage.

Building 9, Library/KCSM Television and Radio

Building 9 is located in the center of campus, on the northeast side of the Main Quad. Renovations would include repurposing the existing space and addressing building code issues, enhancing safety and security, increasing utility efficiencies, modernizing climate controls to improve indoor air quality, renovating restrooms, and addressing ADA accessibility issues.

Building 17, Student Support Services

Building 17 is located between Buildings 16 and 18. Renovations would include modernizing to provide additional space for student support services, addressing building code issues, enhancing safety and security, increasing utility efficiencies, modernizing climate controls to improve indoor air quality, renovating restrooms, and addressing ADA accessibility issues.

Building 34, Fire Sciences/Information Technology Services

Building 34 is located east of East Perimeter Road and west of the Corporation Yard. Renovations would include reconfiguration of the internal space to house facilities administrative functions relocated from Building 7.

Corporation Yard

The Corporation Yard is located northeast of Building 34 and northwest of Bulldog Lot 9. Renovations would include expansion of the existing yard and the addition of service vehicle protection and equipment storage areas, as well as improvements to paving, lighting, and fencing. To accomplish these improvements, portions of the existing landscaped slope between Building 34 and the existing Corporation Yard could be retained, and portions could be graded and paved with a retaining wall.

Potential Renewable Energy Installations

The Project could include renewable energy installations such as PV, solar thermal, wind, or cogeneration (i.e., combined heat and power). Solar renewable energy (PV or solar thermal) could be located at Lots 1, 2, and/or 9 as panels over the current parking (which would also provide shade) or on the roof tops of Buildings 5 and/or 8. Cogeneration/renewable energy would likely be located at Building 7, Facilities Maintenance Center, at the location of the now decommissioned cogeneration plant. Vertical axis wind turbines could be located adjacent to Building 9, Library/KCSM Television and Radio. The District will coordinate with the City of San Mateo Fire Department during the design phase to ensure the design meets fire department standards, as well as other applicable codes and standards.

2.4.3 Skyline College

2.4.3.1 Location and Setting

The Skyline College campus is approximately 108 acres in area and is located on a hilltop in the city of San Bruno. The existing main entrances to the college are via Skyline Boulevard and College Drive on the east side of campus, and Sharp Park Road and College Road on the west side of campus. Regional access to the college is via I-280 and Skyline Boulevard, which extends north–south approximately 1 mile east of campus.

The topography of the campus is relatively hilly. The campus is landscaped with mature trees and large sports fields. The campus core is developed with classrooms and operations buildings, paved parking lots, and pedestrian walkways. Some undeveloped land lies adjacent to the campus. Views of the Pacific Ocean are available on the western edge of campus at Vista Point.

Adjacent land uses include the Marisol single-family residential development to the northeast; residential neighborhoods to the north; college-owned open space to the east; open space and trails of the Golden Gate National Recreation Area to the north and southwest; and San Francisco County's Jail #5 (San Bruno Complex) to the south.

2.4.3.2 Proposed Facility Improvements

Proposed facility improvements at Skyline College include new building construction, modernization and renovation of existing facilities, pedestrian pathway, landscape and hardscape improvements, parking lot expansion, and potential renewable energy installations. Construction of the new Building 1, Social Science/Creative Arts Programs, requires the demolition of the existing Building 1, and expansion of Lot L requires the demolition of Buildings 19 and 20. Following completion of all proposed facility improvements, the campus' perimeter road would be reconfigured, repaired, and repaved as needed. A summary of the proposed facility improvements is shown in **Table 2-3**, and described in detail below. The location of each of the improvements is shown in **Figure 2-4.**

New Building Construction

Building 1, Social Science/Creative Arts Programs

The Project would involve demolition of the existing Building 1, Social Science/Creative Arts Programs, except for the below-grade boiler room and utilities plant portion of the building. The existing Building 1 is three stories high, approximately 78,000 sf, does not meet current seismic and accessibility standards, and contains hazardous materials (e.g., asbestos and lead paint) from its original construction. The existing Building 1 contains a 550-seat theater.

The new Building 1 would be three stories above the existing plaza, one story below the existing plaza, and approximately 120,000 sf. The new building would have a larger footprint than the existing building and would extend into the existing Lot E. The seating capacity of the theater in the existing Building 1, Social Science/Creative Arts Programs, would not be expanded.

Table 2-3. Proposed Facilities Improvements at Skyline College

Proposed Improvement	Facility	Approximate Size
Building Demolition	• Building 1, Social Science/Creative Arts Programs	78,000 sf
	• Buildings 19 and 20 (Pacific Heights)	39,000 sf
New Building Construction	• Building 1, Social Science/Creative Arts Programs	120,000 sf
	• Building 12, Environmental Sciences	20,000 sf
	• Boiler Room and Utilities Plant	3,000–5,000 sf
	• Building 15, Career and Sustainable Technology	8,500–10,000 sf
	• Residential Complex	Up to 71 units (47 single-family and 24 multi-family) on 8 acres
Modernization and Renovation	• Building 2, Workforce/Economic Development Prosperity Center • Building 5, Library/Learning Resource Center • Building 14, Early Childhood Education (Loma Chica)	--[a]
Pedestrian Improvements	• South Pedestrian Gateway, south of Building 1	200,000 sf[b]
	• Pedestrian connection between Environmental Sciences Building and Building 8	400 feet long[b]
Parking Lot Expansion	• Lot L	125–175 new parking stalls
Potential Renewable Energy Installations	• Building 1/1A (cogeneration, energy storage, solar thermal)	30 kwh/sf/yr (maximum)
	• Building 15, Career and Sustainable Technology	30 kwh/sf/yr (maximum)

Notes:

[a] Modernization and renovation could include interior and exterior improvements, but the overall building structures and size would not change.

[b] The size of the pedestrian improvements is unknown at this time but is estimated to be within the currently paved or disturbed area identified in the table, based on the area shown in **Figure 2-4**.

sf = square feet

kwh/sf/yr = kilowatt-hours per square foot per year

As mentioned above, the existing Boiler Room and Utilities Plant located within and adjacent to the existing Building 1 would be preserved and modernized. It currently includes the college's main point of entry for telephone and data communications, the main campus electrical substation, central plant, and supporting utilities. The electrical substation is currently located outside and adjacent to the existing Building 1and is expected to remain in its current location.

As part of the new Building 1 construction, a new pedestrian gateway would be constructed on the south side of the site (refer to *Pedestrian Improvements*).

Building 12, Environmental Sciences Building

The Project would include the construction of a new Building 12, Environmental Sciences, located on the southwest side of campus, between South Loop Road and the campus boundary. This new building would be one story, approximately 20,000 sf, and situated at least 10 feet from the edge of the existing Vista Point.[1] The existing South Loop Road located near the proposed site would be truncated and/or rerouted to accommodate the new building. Some parking spaces would also be removed. Access to the Point Vista Trail, which extends along the edge of Vista Point, would be maintained.

Construction of this new building would include a new pedestrian connection eastward through Lot G to the existing Building 8 (refer to *Pedestrian Improvements*).

Boiler Room and Utilities Plant

The existing boiler room and utilities plant is located within the Building 1 footprint, on the southeast side of Building 2. A new energy efficient boiler room and utilities plant could be installed at the same location or in a new location adjacent to Building 2. If needed, a new boiler room and utilities plant structure would be approximately 3,000 to 5,000 sf. The enclosure would be one to one and a half stories and would be designed to aesthetically and functionally align with existing buildings.

Building 15, Career and Sustainable Technology

The Project would involve construction of a new Building 15, Career and Sustainable Technology located in the northwest portion of campus adjacent to Building 14 and south of Lot L. This new building would be approximately 8,500 to 10,000 sf and would be between one and one and a half stories. The new facility would house the existing program now located in Buildings 19 and 20 (Pacific Heights), as well as a workforce development center.

Residential Complex

Residential development with up to 71 housing units is proposed for the existing approximately 8-acre vacant parcel (Surplus Parcel B) located near the main campus entrance, south of College Drive and east of College Road and Lot A.

The District proposes to subdivide Surplus Parcel B into two parcels. The southwest portion of the site would be up to two acres in area and would be developed with a multi-family residential building with up to 24 units for college faculty and staff. There would be a mix of one-, two-, and three-bedroom apartments and a maximum of three stories for the multi-family development. The northeast portion of the site would be approximately 6 acres in area and would be developed with up to 47 single-family detached homes, which would be constructed by an independent developer and would be available to the general public. The single-family development would be a mix of two- to four-bedroom homes that likely would not exceed two stories.

The site is currently designated for Low Density Residential Development (2.1–8.0 dwelling units/acre) in the *San Bruno General Plan* and is zoned as Open Space (O). The existing O zoning district is not consistent with the Low Density Residential general plan designation that applies to Surplus Parcel B. This conflicts with Government Code Section 65860, which requires zoning ordinance consistency with the general plan.

[1] Vista Point is located at the western edge of the campus and is called *Vista Point* because of its views westward toward Pacifica and the Pacific Ocean.

The District proposes to amend the *San Bruno General Plan* and/or to seek a planned development permit to re-designate the 2-acre southwest parcel as Medium Density Residential (8.1–24.0 dwelling units/acre). This designation was chosen in order to allow multi-family residences; however, the Project would be built at well below the maximum density, as shown in **Table 2-4**. No general plan amendment is proposed for the 6-acre northeast parcel. However, the parcel is proposed to be rezoned as Single Family Residential (R-1). The rezoning would bring this site into conformity with the existing Low Density Residential general plan designation.

Table 2-4. Proposed General Plan Land Use Designations for the Residential Complex

Parcel	Proposed Units	Size (acres)	Proposed Land Use Designation	Project Density
Southwest Parcel	Up to 24 multi-family	Up to 2	Medium Density residential (8.1 to 24.0 du/acre)[a]	12 du/acre
Northeast Parcel	Up to 47 single-family, detached	Up to 6	Low Density residential (2.1 to 8.0 du/acre)[b]	7.8 du/acre

Notes:
[a] This may require a *San Bruno General Plan* amendment and/or a planned development permit
[b] This is the existing general plan designation and is not proposed for change.
du/acre = dwelling units per acre

A new roadway (driveway) would extend from College Drive and/or College Road through the site. Because of the sloped hillside east of the site, there would be retaining walls between the site and College Drive and College Road, and there would be retaining walls behind some of the single-family units. The southeast end of the site would be retained as open space. There would also be stormwater retention and filtration infrastructure to serve the site.

Modernization and Renovation

Building 2, Workforce/Economic Development Prosperity Center

Building 2 is located near the center of campus, west of Building 3 and south of Building 5. This building would be modernized to provide additional and improved space for student support services and instruction, addressing code requirements, enhancing safety and security, increasing utility efficiencies, modernizing climate controls to improve indoor air quality, renovating restrooms, and addressing ADA accessibility issues.

Building 5, Library/Learning Resource Center

Building 5 is located between Buildings 4 and 6 and south of Lot K. The Project would include implementing internal renovations to address code requirements, enhancing safety and security, increasing utility efficiencies, modernizing climate controls to improve indoor air quality, renovating restrooms, and addressing ADA accessibility issues. Additionally, the exterior landscape around the library would be reconfigured to create an entryway and clear pedestrian pathways to Building 4.

Building 14, Early Childhood Education (Loma Chica)

Building 14 is located in the northwest portion of campus, north of College Drive and north of Lot H. Renovations would include implementing modernization to address code requirements, enhancing safety and security, increasing utility efficiencies, modernizing climate controls to improve indoor air quality, renovating restrooms, and addressing ADA accessibility issues.

Pedestrian Improvements

South Pedestrian Gateway

As part of the new Building 1, Social Science/Creative Arts Programs, a new pedestrian gateway would be constructed on the south side of Building 1. The gateway would include a pedestrian connection from Building 1 and the existing Lot C to the main campus. The gateway would help to define a clear point of entry into the campus core, which is located south of Building 6. The pedestrian gateway would be approximately 200,000 sf.

Pedestrian Connection between Building 12 and Building 8

As part of the new Building 12, Environmental Sciences, a new pedestrian connection would be constructed from the new building eastward through Lot G to the existing Building 8. The pedestrian connection would be an approximately 400-foot long landscaped corridor.

Parking Lot Expansion

In the north portion of campus, Buildings 19 and 20 (Pacific Heights) would be demolished to accommodate the expansion of Lot L.

Lot L would be expanded with an additional 125 to 175 new parking spaces. The existing lot is partially paved without clear striping and is estimated to have approximately 112 parking spaces. The lot would be expanded eastward toward Buildings 19 and 20 (Pacific Heights), which would be demolished. These buildings are approximately 39,000 sf, contain hazardous materials (e.g., asbestos and lead paint) from their original construction, and do not meet current accessibility or seismic codes. Building 19 is the old Pacific Heights elementary school, which is now owned by the District.

Prior to its demolition, Building 19 would be used to temporarily accommodate the existing uses from other existing buildings undergoing renovation/modernization. Building 20 is a portable restroom facility and would be removed once no longer needed.

Potential Renewable Energy Installations

The Project could include renewable energy installations such as PV, solar thermal, or cogeneration (i.e., combined heat and power). The renewable energy installations could be located within or on the footprint of Building 1/1A and/or Building 15, Career and Sustainable Technology. Equipment would either be placed within building structures or enclosures. The District will coordinate with the San Bruno Fire Protection District during the design phase to ensure the design meets fire department standards, as well as other applicable codes and standards.

2.4.4 Landscaping

At each of the three campuses, new landscaping would be installed where ground-disturbing activities would occur. All new landscaped areas would consist of native, drought-tolerant plants, shrubs, trees, and grasses.

In general, the District's landscaping practices include onsite mulching of cutting and grass clippings with minimal offsite disposal of vegetative material. The District chips branches and applies the chips to landscaped areas to suppress weed and conserve soil moisture. Mowers and string trimmers are used to manage weeds, in addition to systemic, contact, and pre-emergent herbicides, where applicable. The District maintains firebreaks on undeveloped parts of the campuses and prunes the existing trees for safety two times per year, or as needed. These landscaping practices would continue during and after implementation of the Project.

2.4.5 Green Building Practices and Energy Efficiency Measures

It is anticipated that all new building construction on campus, except the Residential Complex at Skyline College, would target LEED[2] Gold certification, and all new and modernization and renovation as part of the Project would aim to exceed the California Building Code Title 24 2013 Energy Efficiency Standards by at least 15%. The Project could also include renewable energy installations such as PV arrays, solar thermal systems, wind turbines, and/or cogeneration. Specifically, the Project could include the following sustainability strategies.

- Install LED lighting in the parking lot expansions, for reduced energy use in comparison with standard lighting.
- Recycle concrete building materials onsite and incorporate recycled materials into new construction.
- Distribute any reclaimed non-potable water in purple piping for landscape irrigation.
- Capture and reuse of condensate and wastewater from pools or other water features for reuse.
- Install low-flow fixtures including lavatories, showers, kitchen sinks, urinals, and toilets.
- Target diversion of 75% of all solid waste from the landfill by recycling by 2020.
- Use local materials that are low in Volatile Organic Compounds and/or contain high amounts or recycled content.
- Commit to net zero increase in stormwater runoff and systems designed to effectively manage quantity of stormwater flows while protecting local stream water quality.
- Use of advanced energy efficiency design approaches.

The District Board of Trustees has established sustainability goals, and each campus has a sustainability plan, which includes the college's visions, goals, and objectives for sustainability, as well as strategies to meet these goals. The proposed facility improvements at each of the campuses would be consistent with the visions, goals, and objectives in the respective sustainability plans.

[2] LEED, or Leadership in Energy & Environmental Design, is a green building certification program that recognizes best-in-class building strategies and practices. These practices cannot be guaranteed for the residential complex because the developer for the single-family homes is not known at this time.

2.4.6 Construction

2.4.6.1 Construction Activities and Equipment

Each of the proposed facility improvements would involve varying amounts of construction activity and types of equipment, as generally described below. Additional information for purposes of analysis is contained within the resource sections of Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures*.

- Building demolition would involve excavators, backhoes, and dump trucks, as well as equipment to recycle concrete building materials onsite.
- Building construction would involve the use of backhoes, cranes, excavators, trucks, and other heavy machinery.
- Interior building renovation would involve construction activities with hand tools and light and heavy machinery for replacing floors, ceilings, and windows and window coverings and replacement of facility infrastructure and equipment.
- Parking lot renovation and pavement resurfacing could involve grading, rollers, asphalt trucks, spreaders, and painting.

Construction activities may involve the use of fuels, oils, solvents, adhesives, lubricants, paints, and asphalt. These and other construction-related materials would be transported, stored, and handled in a manner consistent with the relevant regulations and guidelines.

To the extent feasible, all excavated soil would remain on the campus and stockpiled on the undeveloped portion of future parking lots, and would be used as fill for the expanded parking lots. Concrete building materials resulting from demolition would be recycled onsite for use in the new facilities.

It is anticipated that the maximum depth of excavation for utilities would be approximately 8 feet. The construction sites would be maintained, to the extent practicable and feasible, in a clean orderly condition at all times.

2.4.6.2 Construction Schedule

The individual facility improvements that comprise the Project would have individual construction schedules. The improvements at each campus are anticipated to be complete within 2 to 3 years during the following timeframes.

- Cañada College: Fall 2016 through Fall 2021 (approximately 5 years).
- CSM: Fall 2016 through Summer 2024 (approximately 8 years).
- Skyline College: Summer 2017 through Spring 2027(approximately 10 years).

It is anticipated that no more than two or three of the improvement projects for each campus could be under construction at the same time. The construction dates are preliminary, and start dates could change as design progresses.

2.4.6.3 Access

During Project construction, emergency vehicle access would be maintained at all times, and the main access roads would be open at all times. The following roads would continue to be the main access roads during construction and be used by contractors for materials deliveries.

- At Cañada College: Farm Hill Boulevard and Campus Loop Road and Cañada Road entrance.
- At CSM: Hillsdale Boulevard and College Drive.
- At Skyline College: College Drive from Sharp Park Boulevard and College Drive from Skyline Boulevard.

Additionally, a traffic control plan would be developed and implemented, as needed, during construction (refer to Section 2.7, *Environmental Commitments*). Minor construction activities may not require a traffic control plan.

2.4.6.4 Staging Areas

The construction staging areas (i.e., where construction equipment and materials would be located) would be on existing parking lots and paved areas adjacent to or within the construction sites. Approved storm water pollution prevention plan (SWPPP) measures would be implemented to protect all staging areas. All construction staging areas would be enclosed with chain link fences.

2.4.6.5 Construction Practices

The District has a set of sustainability strategies for construction on their campuses. These strategies include the following processes.

- Update the existing stormwater management plan for post construction. Per the State Water Resources Control Board Construction General Permit, entities working on campus must develop a SWPPP for all construction activities to minimize erosion and protect water quality.
- Meet LEED credit requirements that are comparable to the San Mateo County's C3 code requirements.
- Develop an interior air quality plan during construction to reduce dust.
- Recycle 95% (target goal) of steel, including steel shapes, reinforcing bars and metal decking.
- Use recycled aggregates for slab sub-base.
- When possible, specify regional materials (within a 500 mile radius), locally harvested products, and locally manufactured products to support local economies and reduce transportation waste.
- Divert a minimum of 50% and target a goal of 75% of all construction waste from the landfill.

2.5 Project Assumptions and Design Features

The following assumptions and definitions apply to the proposed facility improvements described above.

- **Project Boundaries.** All proposed improvements are within the campus' boundaries on property owned by the District.

- **New Building Design**. New building design has not been finalized for any of the proposed new building construction. The building areas and footprints as described above are for the purposes of this analysis only. The buildings would be designed to include landscape features.

  Design and construction of all Project components would comply with the current California Building Code. Project components may be subject to review by the Division of the State Architect (DSA), pursuant to the Safety of Design and Construction of Public School Buildings Act of 1933, popularly known as the Field Act for its author, Assemblyman Don C. Field. As part of this requirement, geologic and seismic safety studies performed for the Project would be subject to review by the California Geological Survey.

  The exteriors of all new buildings would have concrete, stucco, glass panels, metal panels, or aluminum panels. Paint colors would be based on the District's Design Standards and would be white, tan, or other neutral colors, with some accent colors.

  Operation of all uses within the new buildings would be in accordance with applicable guidelines and regulations.

- **Building Modernization and Renovation**. Renovation of existing buildings could include upgrades addressing code requirements, enhancing safety and security, modernizing climate controls to improve indoor air quality, renovating restrooms, and addressing ADA accessibility issues; hazardous waste removal; cosmetic improvements such as paint, new flooring, and new windows and window coverings; and acoustic upgrades such as new ceiling tiles.

- **Parking Lot Expansion**. Expansion of existing parking lots could include re-grading, re-striping, and reorienting the existing parking lots. It would include the addition of drought-tolerant trees and landscaping and designated walkways. It would also include new LED lighting to ensure pedestrian safety. Since there are multiple parking lots being expanded, construction activities would be scheduled and dispersed to ensure there is adequate parking elsewhere on campus.

- **Lighting.** Exterior lighting would be focused onsite, generally directed downward, and designed in such a way as to prevent fugitive glare. To the extent feasible, luminaire mounts (e.g., light poles, wall fixtures, etc.) with non-glare finishes would be installed. The height of light standards would be reduced to the extent practical to limit the potential for backscatter into the nighttime sky and incidental spillover of light. Luminaire intensity would be the minimum necessary for safety. All new lighting would be LED and dimmable.

- **Tree Removal and Planting.** Most trees on the campuses would be retained during the life of the Project, and most tree removal and pruning activities would occur adjacent to, around, or in connection with facility redesign and building and parking lot improvements. However, it may also be necessary or advisable in the future to remove or significantly prune existing trees in the less developed areas of the campuses, such as the hillsides, for aesthetic, fire or safety hazard, biological health, or other reasons. The potential impacts of potential tree removal and pruning activities are considered in this EIR in the relevant resource sections. For example, the District has been advised in the past by the fire marshal that dense stands of highly flammable, nonnative species, such as eucalyptus, pose serious wildfire risks in that they could fuel the rapid spread of fire in less developed areas that could endanger lives and property on the campuses and surrounding neighborhoods. Some tree removal has occurred in the recent past on the hillsides surrounding CSM for this reason, which has allowed the subsequently replanted native oak stands to be established. Additional nonnative or invasive tree removal may be necessary in these or other areas in order to maintain and encourage the continued health of native ecosystems.

- **Renewable Energy Installations.** Each campus could have new renewable energy locations that could be either PV panels, solar arrays, or cogeneration units (i.e., combined heat and power). The exact location, size, and capacity of each of the new installations are unknown at this time.
- **Design Standards.** The District has a robust set of Design Standards which are used to help establish design and construction consistency and operational efficiency and maintainability, while ensuring first class teaching and learning facilities. All appropriate Design Standards would be incorporated into the Project.
- **Grading and Drainage.** A grading and drainage plan would be prepared for improvements involving new building construction, new impermeable surfaces, or re-grading. The Project would comply with the District's Storm Water Management Program, which would ensure that stormwater runoff is handled according to current San Francisco Bay Regional Water Quality Control Board (Regional Water Board) standards. The Project would have a net zero increase in runoff.
- **Utilities.** The Project would not likely necessitate the acquisition of increased capacity or demand on local utility providers and does not include major utility line upgrades, reconfiguration, or disturbance, with the exception of the Residential Complex at Skyline College. In new buildings, utility connections would be placed underground whenever feasible, and aboveground utilities and support structures would be placed in a manner that minimizes their visual impact. The Project would connect to existing City sewer systems.

2.6 Zoning Exemption

Government Code Section 53094 authorizes the board of trustees of a community college district, by two-thirds vote, to render city and county zoning ordinances inapplicable to the proposed use of certain property for educational purposes. In March 2015, the District Board of Trustees took action to exempt the *2015 Facilities Master Plan Amendment* from the application of city and county zoning ordinances. Non-educational uses (i.e., the housing proposed at Skyline College described in Section 2.4.3) are not exempt and will be analyzed for consistency with the appropriate City's zoning ordinances.

Notwithstanding the fact that the District is not bound by local zoning requirements, this EIR discloses all potentially relevant local plans, policies, and ordinances and discusses the Project's consistency with those requirements for informational purposes, consistent with CEQA's purpose. The housing proposed at Skyline College would require an amendment to the San Bruno General Plan, rezoning of a portion of Surplus Parcel B, and approval of a subdivision map and possibly a planned development permit because it is subject to the zoning ordinance of the City.

2.7 Environmental Commitments

Environmental commitments are measures and design features that will be part of the Project to avoid, reduce, or minimize the Project's adverse effects on various environmental resources. These measures can be applied before, during, or after construction of the Project to reduce or eliminate potential environmental effects. The following standard measures, which are drawn from state

regulatory agency standards and other applicable regulations and agency practices, would be implemented as part of the Project. The District would ensure that these measures are included in any Project construction specifications, as appropriate.

In the impact analyses in Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures*, when these measures are required to reduce a significant impact to a less-than-significant level, they are identified as mitigation measures and will be included in the required mitigation monitoring and reporting plan to ensure they are implemented.

EC-AIR-1. Implement dust-control measures to protect air quality during construction

To control dust emissions generated during construction of the Project, the following Bay Area Air Quality Management District measures for construction emissions of particulate matter over 10 microns in size (PM10) will be implemented.

- All exposed surfaces impacted by construction (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) will be watered two times per day, or as needed during the dry season(s) (unless limited by state or local drought response requirements or if there is a rain event).
- All haul trucks transporting soil, sand, or other loose material offsite will be covered.
- All site development will include systems to prevent construction vehicles tracking mud and dirt offsite. Additionally visible mud or dirt track-out onto adjacent public roads will be removed using appropriate equipment and methods at least once per day.
- All construction vehicle speeds on unpaved roads will be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved will be completed as soon as possible. Building pads will be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times will be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage will be provided for construction workers at all access points.
- All construction equipment will be required to be maintained and properly tuned in accordance with manufacturer's specifications. All equipment will be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person will respond and take corrective action within 48 hours. The air district's phone number will also be visible to ensure compliance with applicable regulations.

EC-CUL-1. Implement measures to protect previously unidentified cultural resources during construction

In order to minimize or avoid impacts on buried cultural resources, including human remains, should any be present on the Project sites, the District has committed to the following measures.

- **Stop Work if Buried Cultural Resources Are Discovered**. If buried cultural resources, such as chipped or ground stone, historic debris, building foundations, or human bone or paleontological resources are discovered inadvertently during ground-disturbing activities,

work will stop in that area and within 100 feet of the find until a qualified professional archaeologist can assess the significance of the find and develop appropriate treatment measures in consultation with the District and other appropriate authority. The District will be responsible for ensuring that treatment measures are implemented.

- **Comply with State Laws Relating to Human Remains**. According to the California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100); disturbance of Native American cemeteries is a felony (Section 7052). Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the Native American Heritage Commission (NAHC).

  If human remains of Native American origin are discovered during Project construction, it will be necessary to comply with state laws relating to the disposition of Native American burials, which fall under the jurisdiction of the NAHC (Public Resources Code [PRC] Section 5097). Consequently, if any human remains are discovered or recognized in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains (1) until the San Mateo County Coroner has been informed and has determined that no investigation of the cause of death is required; and (2) if the remains are of Native American origin:

  - the descendants of the deceased Native American(s) have made a recommendation to the landowner or the person responsible for the excavation work regarding means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98; or
  - the NAHC has been unable to identify a descendent or the descendent failed to make a recommendation within 24 hours after being notified by the NAHC.

EC-HAZ-1. Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities

The contractors will develop and implement a Spill Prevention, Control, and Countermeasure Program (SPCCP) to minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities. The SPCCP will be completed before any construction or demolition activities begin. Implementation of this measure will comply with state and federal water quality regulations.

The District will review and approve the SPCCP before onset of construction activities. The District will routinely inspect the construction area to verify that the measures specified in the SPCCP are properly implemented and maintained. The District will notify its contractors immediately if there is a noncompliance issue and will require compliance.

The federal reportable spill quantity for petroleum products, as defined in 40 Code of Federal Regulations 110, is any oil spill that includes any of the following.

- Violates applicable water quality standards.
- Causes a film or sheen on or discoloration of the water surface or adjoining shoreline.
- Causes a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.

If a spill is reportable, the contractors' superintendents will notify the District, and the District will take action to contact the appropriate safety and cleanup crews to ensure that the SPCCP is followed. A written description of reportable releases must be submitted to the San Francisco Bay Regional Water Quality Control Board. This submittal must contain a description of the spill, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred, and a description of the steps taken to prevent and control future releases. The releases would be documented on a spill report form.

If a reportable spill has occurred and results determine that Project activities have adversely affected surface water or groundwater quality, a detailed analysis will be performed by a registered environmental assessor to identify the likely cause of contamination. This analysis will conform to American Society for Testing and Materials (ASTM) standards, and will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, the District and its contractors will select and implement measures to control contamination, with a performance standard that groundwater quality must be returned to baseline conditions. These measures will be subject to approval by the District.

EC-HAZ-2. Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction

The construction specifications will include this measure to protect construction workers and/or the public from known or previously undiscovered soil and groundwater contamination during construction activities. Prior to excavation, a site safety plan (soil and groundwater management plan) will be prepared and, at a minimum, include the following.

- A requirement that all construction activities involving work in proximity to potentially contaminated soils and/or groundwater be undertaken in accordance with California Occupational Safety and Health Administration (Cal-OSHA) standards, contained in Title 8 of the CCR.
- Soil and groundwater mitigation and control specifications for construction activities, including health and safety provisions for monitoring exposure to construction workers, procedures to be undertaken in the event that previously unreported contamination is discovered, and emergency procedures and responsible personnel.
- Procedures for managing soils and groundwater removed from the site to ensure that any excavated soils and/or dewatered groundwater with contaminants are stored, managed, and disposed in accordance with applicable regulations.

EC-HAZ-3. Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities

To protect construction workers and members of the public from known or undiscovered hazardous building materials, including asbestos and lead, all demolition activities will be undertaken in accordance with the California Occupational Safety and Health Administration (Cal-OSHA) standards contained in Title 8 of the California Code of Regulations (CCR). During demolition activities, all building materials containing lead-based paint will be removed in accordance with Cal-OSHA Lead in Construction Standard, Title 8, CCR 1532.1. All potentially friable asbestos-containing materials (ACMs) will be removed in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to building demolition or renovation that may disturb the materials. Applicable standards include the following.

- The facility will be inspected before any renovation occurs in which 160 square feet or more of building materials or 260 linear feet or more of pipe insulation will be disturbed at a regulated facility , or any demolition occurs at a regulated facility.
- An asbestos notification form will be submitted to the Bay Area Air Quality Management District (BAAQMD) for any regulated asbestos abatement Project or regulated demolition 10 working days before the activity begins.
- If ACMs are discovered during a renovation or demolition, they must be removed before the Project may proceed. Also, the Cal-OSHA and California Environmental Protection Agency (Cal-EPA) hazardous waste regulations apply in most cases.

EC-HYD-1. Implement erosion-control measures to protect water quality during construction

To minimize the mobilization of sediment to storm drains and adjacent water bodies, the following erosion- and sediment-control measures would be included in the storm water pollution prevention plan (SWPPP); this plan will be included in the Project's construction specifications, based on standard industry measures and standard dust-reduction measures.

- Cover or apply nontoxic soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more) that could contribute sediment to waterways.
- Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways.
- Contain soil and filter runoff from disturbed areas by berms, vegetated filters, silt fencing, straw wattle, plastic sheeting, catch basins, or other means necessary to prevent the escape of sediment from the disturbed area.
- Prohibit the placement of earth or organic material where it may be directly carried into a stream, marsh, slough, lagoon, or body of standing water.
- Prohibit the following types of materials from being rinsed or washed into streets, shoulder areas, or gutters: concrete, solvents and adhesives, fuels, dirt, gasoline, asphalt, and concrete saw slurry.
- Conduct dewatering activities according to the provisions of the SWPPP. Prohibit placement of dewatered materials in local water bodies or in storm drains leading to such bodies without implementation of proper construction water quality control measures.

EC-NOI-1. Implement measures to minimize effects of construction-related noise

The following noise-control measures would be included in the construction contract specifications to reduce and control noise generated from construction, demolition, and renovation-related activities.

- The normal working day for construction activities will generally be between of 6:00 a.m. and 7:00 p.m. on weekdays. Some construction may need to occur on weekends to minimize disruption to college operations. There will be no construction on public holidays. Local barriers around equipment and other noise attenuating devices will be used if necessary to limit noise to acceptable levels.

- Construction equipment will have appropriate mufflers, intake silencers, and noise-control features, and would be properly maintained and equipped with exhaust mufflers that meet state standards.
- Vehicles and other gas- or diesel-powered equipment will be prohibited from unnecessary warming up, idling, and engine revving.
- A sign will be posted at the construction site giving the name and telephone number or e-mail address of the District staff member whom the public should contact with any noise complaints. If necessary due to complaints, the construction contractor will provide additional noise-attenuating measures such as additional mufflers or engine shrouding.

EC-TRA-1. Implement a traffic control plan during construction

The District will require the construction contractor(s) to develop a traffic control plan, as appropriate, to minimize the effects of construction traffic on the surrounding area. (A traffic control plan may not be required for minor construction activities.) The plan will be subject to review and approval by the District. The District will be responsible for monitoring to ensure that the plan is effectively implemented by the construction contractor(s). The construction traffic control plan will include the following requirements.

- Provide clearly marked pedestrian detours if any sidewalk or pedestrian walkway closures are necessary.
- Provide clearly marked bicycle detours if heavily used bicycle routes must be closed, or if bicyclist safety might be otherwise compromised.
- Provide crossing guards and/or flag persons as needed to avoid traffic conflicts and ensure pedestrian and bicyclist safety.
- Use nonskid traffic plates over open trenches to minimize hazards.
- Locate all stationary equipment as far away as possible from areas used heavily by vehicles, bicyclists, and pedestrians.
- Notify and consult with emergency service providers and provide emergency access by whatever means necessary to expedite and facilitate the passage of emergency vehicles.
- Avoid routing construction traffic through residential areas to the extent feasible. Prohibit mobilization and demobilization of heavy construction equipment during AM and PM peak traffic hours.
- Provide access for driveways and private roads outside the immediate construction zone by using steel plates or temporary backfill, as necessary.
- Prohibit construction worker parking in residential areas.

2.8 Required Permits and Approvals

Table 2-5 lists the anticipated permits and approvals that would be required for the Project.

Table 2-5. Required Permits and Approvals

Agency	Permit/Review Required
San Mateo County Community Colleges District Board of Trustees	Adoption of the EIR and Project approval
San Francisco Bay Regional Water Quality Control Board	National Pollutant Discharge Elimination System General Permit for Construction Activities (General Construction Permit)
California Division of the State Architect[a]	Project approval, design review, and building inspection (if required)
Woodside[b]	N/A
Redwood City[b]	N/A
San Mateo[b]	N/A
San Bruno	Approval of general plan amendment and/or planned development permit, rezoning, and subdivision map for the residential complex proposed at Skyline College's Surplus Parcel B

Notes:

[a] The California Division of the State Architect (DSA) currently acts as California's policy leader for public building design and construction, and provides design and construction oversight for community colleges, including the Project (except for the residential complex at Skyline College). DSA develops and maintains the accessibility standards and codes utilized in public and private buildings throughout California. Excellence in Public Buildings is a program developed by DSA and the Real Estate Services Division to shape the planning and construction of new public construction projects in California. These principles are compiled in *Excellence in Public Buildings—a Guide for Stakeholders,* which includes best practices and design guidelines. The Project, as described in Chapter 2, *Project Description*, would be subject to Project approval by DSA.

[b] No permits or approvals are required from the Woodside, Redwood City, or San Mateo.

Chapter 3
Environmental Setting, Impacts, and Mitigation Measures

As described in Chapter 2, *Project Description*, the Project includes improvements at each of the District's three campuses: Cañada College in Redwood City and Woodside, College of San Mateo in San Mateo, and Skyline College in San Bruno. The improvements include building modernization and renovation; building demolition and new building construction; landscape, hardscape, and pedestrian walkway improvements; parking expansion/reconfiguration and roadway modifications; and renewable energy and water conserving installations.

This chapter contains the following resource sections.

- 3.1, *Aesthetics*
- 3.2, *Air Quality and Energy*
- 3.3, *Biological Resources*
- 3.4, *Cultural Resources*
- 3.5, *Geology, Soils, and Paleontology*
- 3.6, *Greenhouse Gas Emissions*
- 3.7, *Hazards and Hazardous Materials*
- 3.8, *Hydrology and Water Quality*
- 3.9, *Land Use and Planning*
- 3.10, *Noise*
- 3.11, *Population and Housing*
- 3.12, *Public Services and Utilities*
- 3.13, *Recreation*
- 3.14, *Transportation and Traffic*

In each resource section, the *Regulatory Setting* section describes applicable plans, policies, and regulations, and the *Environmental Setting* section describes the existing or baseline conditions for the resources in the three study areas. Each study area is the same as the Project site (i.e., campus) for some resources, and is larger for other resources (e.g., air quality, transportation).

Also in each resource section, the *Impacts Analysis* section describes the methodology used for the analysis, the criteria used to determine the significance of potential impacts, and a corresponding discussion of Project impacts. For each potential impact, a significance determination is made (less than significant, less than significant with mitigation, or significant and unavoidable). If required to reduce a significant impact, feasible mitigation measures are identified.

When the District's environmental commitments (refer to Chapter 2, P*roject Description*, Section 2.7) are required to reduce a significant impact to a less-than-significant level, they will be identified as mitigation measures and included in the required mitigation monitoring and reporting plan.

A discussion of the Project's potential contribution to cumulative impacts is included at the end of each resource section in Chapter 3, but the conclusions and a summary discussion are presented in Chapter 4, *Other CEQA-Required Sections*.

Section 53094 of the Government Code authorizes the board of trustees of a community college district, by two-thirds vote, to determine the District's proposed use of certain property for educational purposes to be exempt from city and county zoning ordinances. The San Mateo County Community College District Board made that determination in a 5-0 vote in March 2015, with respect to its master plan updates that are the basis for the Project analyzed in this EIR. The District's proposed development of a housing facility on the Skyline College campus is not exempt as it is not an educational use. Notwithstanding the fact that the District is not bound by local zoning requirements, this EIR discloses all potentially relevant local plans, policies and ordinances, and discusses the Project's consistency with those requirements for informational purposes, consistent with CEQA's purpose.

3.1 Aesthetics

This section describes concepts and terminology and the regulatory and environmental setting for aesthetics. It also describes impacts on aesthetics that would result from implementation of the Project and mitigation for significant impacts where feasible and appropriate.

3.1.1 Concepts and Terminology

3.1.1.1 Area of Visual Effect

The visual resources analysis area is defined as the *area of visual effect* (AVE) that is comprised of viewsheds, or what people can see in the landscape. The AVE and its viewsheds are defined by the physical constraints of the environment and the physiological limits of human sight. Physical constraints of the environment include landform, land cover, and atmospheric conditions. Landform is a major factor in determining the AVE because it can limit views or provide an elevated perspective for viewers. Similarly, land cover, such as trees and buildings, can limit views, while low growing vegetation and the absence of structures can allow for unobscured views. Atmospheric conditions such as smoke, dust, fog, or precipitation can temporarily reduce visibility.

The physiological limits of human sight are affected by location, proximity, and light. *Location* refers to the topographic position of the viewer such as being even with or above or below what is being observed. Proximity is broken down into three distance zones: foreground (up to 0.5 mile from the viewer), middleground (0.5 mile to 3 to 5 miles from the viewer), and background (from 3 to 5 miles to infinity). Features in the landscape are more dominant and have a greater importance the closer the resource is to the viewer; whereas importance is reduced the farther away features are from the viewer. This is because details and features in the landscape, including project elements, become lost and comprise a smaller portion of the total landscape as distance from the viewer increases. In the background, the scale and color of existing landscape elements and Project features blend so that only broad forms, large-scale patterns, and muted colors are evident. Light influence also plays a large role in affecting views such as during the daytime when views are more readily available versus the nighttime when darkness greatly reduces the ability to see details and color in the landscape without bright moonlight or artificial light sources. In addition, lighting levels change throughout the day, making color and individual forms more prominent with more light and less distinct as light decreases.

The environment's physical constraints and limits of human sight combine to provide for viewsheds that range from restrictive to expansive and AVEs that range from being smaller and more confined to larger and wider reaching (Federal Highway Administration 2015:4-5–4-9, 6-3–6-4; Litton 1968:3–5).

Scenic vistas may occur within an AVE. *Scenic vistas* generally encompass a wide area with long-range views to the middle and background of surrounding elements in the landscape. Viewers may have scenic vista views from elevated vantages (e.g., hilltops and slopes), open agricultural lands, and roadways. Some vistas may encompass a 360-degree view in all directions, while others may be narrower. Scenic vistas may be designated by a local jurisdiction or community value but may also include areas that have a high level of viewer sensitivity, such as a lookout point.

For the Project, there are three independent AVEs, which are described in more detail in Section 3.1.3, *Environmental Setting.* These include (1) Cañada College, (2) College of San Mateo (CSM), and (3) Skyline College.

3.1.1.2 Visual Quality

Visual quality is determined by assessing what viewers like and dislike about the visual character of the AVE. Visual quality depends on how the viewer desires a view to look and what is actually seen. If the two are aligned, then often the viewer is pleased and the visual quality is considered to be good or high. However, if what is desired to be seen and what is seen do not align, then people tend to be displeased and the visual quality is considered to be poor or low. Viewer preference is also motivated by self-interest where the self-interest and visual preference of a neighbor to the site relates to the use of their property, whereas a site user's self-interest and visual preference relates to their purpose for using the site. (Federal Highway Administration 2015:5-11–5-12.)

3.1.1.3 Visual Sensitivity

The measure of the quality of a view must be tempered by the overall sensitivity of the viewer. *Viewer sensitivity* or concern is based on viewer exposure and viewer awareness.

Viewer exposure is based on the following elements.

- **Proximity.** This is the viewer's proximity to an object or scene, and is described using distance zones (refer to Section 3.1.1.1, *Area of Visual Effect*).
- **Extent.** This is the number of people that will be viewing an object or scene where fewer viewers means less exposure and many viewers means greater exposure.
- **Duration.** This is how long viewers are in contact with the object or scene. Narrow views seen quickly in passing have shorter durations and less exposure, whereas wider views that are seen from a more stationary position have longer durations and greater exposure. With greater exposure comes increased viewer concern for visual impacts.

Viewer awareness includes the following elements.

- **Attention.** This is how common a scene is to a viewer where the more common the scene is, the less sensitive the viewer is whereas the more unique the scene, the more sensitive the viewer will be.
- **Focus.** This includes details or elements that draw attention. Views with no specific visual element or focal point draw less attention to focus the viewer and the viewer will be less sensitive to the details of that scene. However, a viewer will have greater sensitivity to details if there are details or elements that stand out in the view.
- **Protection.** This includes legal and social protection and may not be explicitly for visual resources. For example, recreational, historic, and ecological values can create a need to protect the aesthetic values of those features because viewers will be sensitive to changes in the protected resource. (Federal Highway Administration 2015:6-2–6-3.)

Commuters and non-recreational travelers have generally fleeting views and tend to focus on commute traffic, not on surrounding scenery; therefore, they are generally considered to have lower visual sensitivity. Residential viewers typically have extended viewing periods and are concerned about changes in the views from their homes; therefore, they are generally considered to have higher visual sensitivity. Viewers using recreation trails and areas, scenic highways, and scenic overlooks are usually assessed as having higher visual sensitivity.

Judgments of visual quality and viewer response must be made based in a regional frame of reference (U.S. Soil Conservation Service 1978:3). The same landform or visual resource appearing in different geographic areas could have a different degree of visual quality and sensitivity in each setting. For example, a small hill may be a significant visual element on a flat landscape but have very little significance in mountainous terrain.

3.1.2 Regulatory Setting

The following federal, state, and local regulations are relevant to aesthetics and apply to implementation of the Project on all three campuses unless otherwise specified.

3.1.2.1 Federal

There are no federally designed scenic roadways near the Project areas for any of the campuses.

3.1.2.2 State

California Scenic Highway Program

The California Scenic Highway Program is maintained by the California Department of Transportation (Caltrans) and identifies scenic highway corridors for preservation and protection of aesthetic value. Caltrans maintains a list of routes that are adopted and eligible for designation as a scenic highway. There are three state adopted scenic highways in San Mateo County, which include portions of Interstate 280 (I-280), State Route (SR) 1, and SR 35 (California Department of Transportation 2015). Portions of two other highways are designated as eligible, and include sections of SR 1 and SR 92. Of these identified highways, an adopted portion of I-280 occurs about 0.3 mile west of Cañada College in Redwood City. None of the other adopted or eligible state scenic highways occur near the campuses. The remaining adopted and eligible state scenic highways do not include views of any of the campuses.

Caltrans defines a *scenic corridor* as the "land that is visible from, adjacent to, and outside the highway right-of-way, and is comprised primarily of scenic and natural features. Topography, vegetation, viewing distance, and/or jurisdictional lines determine the corridor boundaries." Designated scenic corridors are subject to protection, including the regulation of land use, site planning, advertising, earthmoving, landscaping, and design and appearance of structures and equipment. Examples of visual intrusions that would degrade scenic corridors as stipulated by Caltrans, which are applicable to the Project, include dense and continuous development, highly reflective surfaces, development along ridge lines, extensive cut and fill, scarred hillsides and landscape, exposed and unvegetated earth, and dominance of exotic vegetation. Unsightly land uses would include actions that result in these conditions. (California Department of Transportation 2008:1, 23–25.)

Division 1, Chapter 2, Article 2.5, Sections 260–284 of the California State Streets and Highway Code establishes the following standards for official scenic highways.

> The standards for official scenic highways shall also require that local governmental agencies have taken such action as may be necessary to protect the scenic appearance of the scenic corridor, the band of land generally adjacent to the highway right-of-way, including, but not limited to (1) regulation of land use and intensity (density) of development; (2) detailed land and site planning; (3) control of outdoor advertising; (4) careful attention to and control of earthmoving and landscaping; and (5) the design and appearance of structures and equipment.

3.1.2.3 Local

As stated in Section 2.6 of Chapter 2, *Project Description*, the District is exempt from the application of city and county zoning ordinances, except the proposed residential complex at Skyline College because it is a non-educational use. However, the current zoning and applicable general plan provisions for each campus are provided for informational purposes.

San Mateo County General Plan

The Visual Quality Policies section of the San Mateo County General Plan includes goals, objectives, and general policies pertaining to visual quality (San Mateo 1986:4.1P-4.14P). Table 4.6 of the Visual Quality Policies section of the general plan lists state and County-designated scenic roads. There are a total of 32 County-designated scenic roads, of which six occur within 0.5 mile of the campuses.

- Cañada College—Cañada Road.
- College of San Mateo—Crystal Springs Road, Alameda de las Pulgas, SR 92, and Polhemus Road.
- Skyline College—Sharp Park Road.

Views within 0.5 mile are within the foreground, where viewers would be able to see discernable details in the landscape. Beyond this, visual elements become a conglomeration of the larger, overarching landscape composition.

The following list includes relevant goals and objectives that pertain to the Project.

Policy 4.2b. Maximize the preservation of significant public ocean views.

Policy 4.3. Minimize the removal of visually significant trees and vegetation to accommodate structural development.

Policy 4.7a. Define ridgelines as the tops of hills or hillocks normally viewed against a background of other hills.

Policy 4.7b. Define skylines as the line where sky and land masses meet.

Policy 4.8. Define visual resources as those attractive visible elements of the natural and developed landscape, such as landforms, vegetation forms, water bodies, structures, and communities.

Policy 4.9. Define visual quality as the visual attributes of natural landscapes, structures, and communities.

Policy 4.10. Define public view as a range of vision from a public road or other public facility.

Policy 4.11. Define a scenic road as a designated travel route providing outstanding views of natural landscapes and attractive man-made development.

Policy 4.12. Define a scenic corridor as land adjacent to a scenic road right-of-way which, when seen from the road, provides outstanding views of natural landscapes and attractive man-made development.

Policy 4.22. Protect and enhance the visual quality of scenic corridors by managing the location and appearance of structural development.

Policy 4.28a. Discourage structures on open ridgelines and skylines, when seen as part of a public view in order to preserve visual integrity.

Policy 4.28b. Allow structures on open ridgelines and skylines as part of a public view when no alternative building site exists.

Policy 4.28d. Define public view as a range of vision from a public road or other public facility.

Policy 4.30a. Provide a smooth transition between development and adjacent forested or open space areas through the use of landscaping.

Redwood City General Plan

The northeast portion of Cañada College is in Redwood City. The Redwood City General Plan contains the following relevant policies pertaining to aesthetic resources (Redwood City 2010: BC-19, NR-14, NR-24, NR-51).

Building Community Element

Policy BC-1.3. Enhance street corridors, parkways, and public property between buildings to serve as functional recreation and green space.

Policy BC-1.6. Continue to consult with the school districts and Cañada College to supplement City park facilities with those of the districts and college.

Natural Resources Element

Policy NR-2.2: Encourage the use of drought-tolerant, low-water consuming landscaping as a means of reducing overall and per capita water demand.

Policy NR-4.5. Conserve energy by promoting efficient and cost-effective lighting that reduces glare and light pollution.

Policy NR-9.1. Preserve, maintain, and expand the number of trees in Redwood City's urban forest, on both public and private property.

Policy NR-9.2. Require new trees to be planted and/or plant new trees in sufficient number, as identified on a site by site basis, on sites designated as sensitive receptors (i.e. schools or hospitals) that are in close proximity to industry, heavily traveled freeways and roads, and other similar pollution sources in order to mitigate air pollution.

Policy NR-9.3. Select appropriate trees for Redwood City, focusing especially on native and landmark tree types.

Town of Woodside General Plan

The majority of Cañada College is in Woodside. The Woodside General Plan Land Use Element contains the following policies that apply to aesthetic resources (Town of Woodside 2012:50, 51, 54).

Land Use Element

Policy LU1.1 – Give High Priority to Preservation and Conservation of Natural Resources: Preserve and conserve the Town's natural resources by subordinating development to the land, employing conservation best management practices, and acquiring conservation and open space easements. Valuable natural features, such as streams and stream corridors, scenic corridors, woodlands, meadowlands, ridge tops and hill tops, and significant stands of trees, shall be preserved and protected through imaginative planning, good conservation practices and, where appropriate, the dedication of open space, conservation, or scenic easements. Stream corridors, ponds, and wetlands must be kept free of structures and maintained in a natural condition, except for erosion and flood control measures and other uses beneficial to the water regimen.

Policy LU1.2 - Limit Intensity of Development: Property shall be developed with minimum disturbance to the natural terrain. The natural environment and rural character of the Town should be retained or restored as much as possible, including measures to:

1. Retain open space;
2. Decrease land use intensity on steep hillsides and the mountainous areas where it is necessary to limit storm runoff, prevent increased erosion, avoid natural hazards, protect vegetation and watersheds, and maintain scenic qualities;
3. Minimize grading and alteration of natural land forms;
4. Manage intensity of use of individual parcels and buildings by considering health and safety, impacts on adjoining properties from noise, traffic, night lighting, or other disturbing conditions, and protection of natural land characteristics;
5. Limit principal uses and accessory uses to those which can be accommodated without encroaching upon areas identified in the Open Space element of this Plan for conservation of natural resources, general open spaces, or upon areas that present hazards for the type of use and occupancy accommodated on the parcel; and,
6. Encourage the maintenance of livestock, particularly horses, as an important component of the rural character of the Town.

Policy LU1.3 - Maintain Community Aesthetics: New development will be reviewed for conformity with design policies, including:

1. Site and Structure Relationship - Structures should be designed to be subordinate to the natural environment, responsive to site constraints, and compatible with the rural character of the community. Large, bulky structures should be discouraged, particularly if they are visible from the road. All building designs should conform to the topography and scale of the land and should not be silhouetted against the skyline as viewed from any town- or state-designated scenic road. The visual impact of the structure should be mitigated either through minimizing building bulk or increasing setbacks. In general, hillside structures should be designed to step down the natural hillside in order to achieve a low building profile and minimize grading.
2. Colors and Materials - Encourage the use of fire-safe, natural, and natural appearing materials. Exterior colors shall blend with the surrounding natural landscape by using earth tones or natural finishes.
3. Landscaping - Landscaping should be designed to complement the natural attributes of the site, rather than relied upon to reduce the visual impacts of inappropriately designed and scaled structures. Avoid linear planting which can result in green fences and walls. Natural vegetation should dominate, and the use of drought-tolerant and native plants is strongly encouraged. Fences should be wildlife-friendly and avoid creating visual walls and tunnel effects along roadways. Landscaping plans and materials should be informal in character and provide smooth transitions between buildings, parking lots, adjacent roadways, and open areas.
4. Utilities - Utility lines and other infrastructure should be installed to minimize visual and environmental impacts.

Policy LU1.7 - Limit Public and Private Institutions to Those Required for the Wellbeing of the Community: Institutional uses should be limited to those which provide non-commercial services or facility for local residents and contribute to the general well-being of the community. The intensity of use of an institutional site should be limited to that which is compatible with adjoining uses, and in keeping with the rural character of Woodside. Institutional uses should not generate excessive noise or traffic. Institutional buildings should be of a size and scale compatible with the rural residential atmosphere of the community. Sites should be landscaped attractively. Trees and other plantings should be considered to shield adjacent residential developments from activities on institutional properties. Native plants shall be used where practicable. In particular, parking areas should be screened from view from roads and adjacent residential properties. Institutions shall have access from arterial roads.

Circulation Element

A Class II bikeway follows Cañada Road near Cañada College. Scenic corridors within 0.5 mile of Cañada College that are identified in the general plan include state-designated I-280 and County- and locally-designated Cañada Road.

The general plan establishes that the Woodside Municipal Code (WMC) protects lands, and projects on such lands are subject to Architectural and Site Review Board or Planning Commission review, that are located within 1,000 feet and visible from the driving surface of Town scenic roads, or located on ridge tops visible from designated scenic highways and roads. The WMC also sets forth special setback requirements for properties within scenic corridors. The following policies apply (Town of Woodside 2012:95, 96).

Policy CL2.1 – Maintain and Improve Town Roadways: Maintain and improve the physical condition and safety of Town roadways consistent with a rural and scenic environment.

Policy CL2.2 – Protect and Designate Scenic Corridors: State scenic highway legislation does not prohibit development projects within officially designated scenic corridors. The only prohibited structures are outdoor advertising signs. State guidelines do, however, require the adoption of scenic corridor architectural regulations by local governments for those portions of scenic corridors within their jurisdictions. In Woodside, these regulations are extended to local scenic roads.

Open Space Element

The general plan identifies that "open space is set aside for public health and safety, natural resource conservation, aesthetics, recreation, and managed production of resources" and protects scenic roads and trail systems as open space corridors. In addition, parks are protected, which includes Barkley Fields and Park (Town of Woodside 2012:148–151, 167, 168, 170).

Policy OS1.1 - Review All Development to Ensure Preservation of Open Space: Preservation of open space resources in the Woodside Planning Area should be given the highest priority. Any development should be in harmony with the rural character of the Town and optimize opportunities to preserve open space.

1. Review Developments to Conserve Open Space - Review all development applications to ensure the preservation of open space for health and safety in high hazard areas, natural resource protection for things such as water bodies, riparian corridors, other significant stands of native vegetation, and other areas of special ecological significance, and other open space uses, such as scenic trails, and wildlife corridors. Where appropriate, impose conditions designed to conserve open spaces in conformity with the General Plan, and/or acquire dedications of open space, scenic and/or conservation easements.
2. Mitigation - Review and mitigate environmental impacts from proposed development, such as: fencing, landscaping, lighting, riparian encroachment, tree removal and drainage impacts, etc., as appropriate.
3. Ensure Harmony with Natural Setting - Ensure that the scale of building, the siting of structures, and the design and materials of construction is harmonious with the natural setting so that the visual quality of open spaces is not unreasonably impaired.
4. Subordinate Structures to the Environment - Structures should be subordinate to the site so that the dominant feature of the Town is the natural environment.

Policy OS1.5 - Protect Scenic Resources: Conserve open space as a means to protect scenic resources.

1. Design Review - Design review shall strive to protect scenic roads and corridors, the Western Hills, and other vistas. Also reference the Circulation Element.
2. Landscaping - Design landscaping along scenic roads and corridors in informal patterns to avoid linear patterns, or green "walls" or fences along rights-of-way.
3. Preserve Natural Vegetation - Preserve natural vegetation along scenic roads, corridors, vistas, and in the Western Hills.

Conservation Element

The Woodside General Plan Conservation Element contains the following policies that apply to aesthetic resources (Town of Woodside 2012:200, 201).

Policy CV1.1 – Plan Development to be Sensitive to Preservation of Natural Features and Landscape:

1. The natural features of a site proposed for development shall be the primary planning factor determining the scope and magnitude of development, and appropriateness of site use. Conservation of the natural landscape shall be an overriding consideration in the design of any land development or land division project, paying particular attention to its protection and the preservation of natural features and existing native vegetation.
2. Those areas rich in wildlife, or of a fragile ecological nature (e.g. areas of rare, endangered, or threatened species, riparian areas, etc.), shall be avoided in land development.
3. All projects that may have significant impact on the Woodside environment shall be reviewed by qualified professionals. The results of such review should be analyzed and, where necessary, mitigation measures implemented to insure against significant alteration or damage to the natural environment.

Policy CV1.3 – Retain and Restore Native Flora and Fauna Habitat and Populations: Consider and minimize project impacts on native flora and fauna habitat and populations in compliance with State and federal law. Retain and restore native flora and fauna habitat and populations to the extent feasible.

1. Minimize the removal of vegetation. Where removal is necessary, replanting should be required to maintain soil stability, prevent erosion, maximize reoxygenation and retain the aesthetic qualities of the community. Emphasis should be placed upon maintenance of fauna habitat to preserve nesting areas and cover from predators.
2. Use native and fire resistant plants. In landscaping of individual sites, and replanting where original vegetation has been destroyed or removed, the emphasis shall be on use of native rather than exotic plants. Preference should be given to exotic plants with high fire resistance characteristics in areas of high fire risk.
3. Avoid topsoil destruction. Topsoil destruction through overuse by motor vehicles or horses should be considered in environmental impact review and preventive measures should be required where necessary. In those areas where topsoil has been destroyed, remedial measures should be initiated and pursued.
4. Avoid impacts to habitat and wildlife corridor. Structures and fences should be sited to avoid fragmentation of habitat areas, obstructions to linear wildlife corridors, and other adverse impacts.

City of San Mateo General Plan

The College of San Mateo is within the San Mateo city limits.

The San Mateo General Plan contains the following policies that apply to aesthetic resources (City of San Mateo 2010).

Land Use Element

Land Use Element Figure LU-4 establishes that heights are restricted to 90 feet at the CSM campus (City of San Mateo 2010: II-10, II-36, II-37).

> **Policy LU 1.5**: **Building Height**. Maintain maximum building height limits contained in Appendix C, and as specified in Policy LU 6A.2, closely matched with the Land Use categories and Building Intensity standards.
>
> **Policy LU 6A.2: Building Height and Building Intensity Maps/Plans.** Maintain Building Height and Building Intensity maps/plans which delineate development intensity in the form of building heights and FARs in a manner which implements the height, intensity, density and design standards in the General Plan, consistent with the Building Heights and Intensities maps/plans as amended by initiative in November 1991 and November 2004. General Plan standards for building heights and intensities are specifically set forth in the Building Height Plan and the Building Intensity Plan that were formerly included in the General Plan, and designated respectively as figure LU-4 in the table of contents (marked as figure LU-5), and figure LU-5 in the table of contents (marked as figure LU-6).

Urban Design Element

Urban Design Element Figure UD-1 establishes that there is a minor focal point that includes the easternmost portion of the CSM campus and extends west to SR 92, just north of Hillsdale Boulevard (City of San Mateo 2010:V-7, V-8, V-21).

> **Goal 1.** Establish a positive and distinctive City image by taking advantage of the natural setting and by developing and improving focal points, gateways, and major corridors.
>
> **Policy UD 1.1: Focal Points.** Emphasize and improve established focal points identified as the Downtown, Hillsdale Station Area, including the Caltrain Station and the Hillsdale Shopping Center, Bridgepointe, Hayward Park Caltrain Station and adjacent office development areas, the intersections of US 101 and SR 92 and SR 92 and El Camino Real (SR 82), and the SR 92 corridor. Encourage focal points by emphasizing a particular use, or feature, or through entry or landscape treatments. Focal points should be discouraged at inappropriate locations.
>
> **Policy UD 1.2: Preservation of Natural Focal Points.** Preserve and enhance views of and access to the foothills and the Bay through the design of new development consistent with the Shoreline Park Specific Plan. (See related policy C/OS-1.7.)
>
> **Policy UD 1.5: Direct Corridors to Focal Points.** Visually improve and direct toward focal points the major corridors of Third Avenue, Fourth Avenue, Hillsdale Boulevard and El Camino Real (SR 82) with the installation of street trees, street lights and consistent building setbacks.
>
> **Policy UD 2.8: Trademark Building Forms.** Discourage 'signature' or trademark building forms or colors where they would contribute to the visual clutter of the area.

Conservation and Open Space Element

Conservation and Open Space Element and Figure C/OS-4 identifies Crystal Springs Road, Alameda de las Pulgas, SR 92, and Polhemus Road as San Mateo County- and locally-designated scenic roadways within 0.5-mile of the CSM campus (City of San Mateo 2010:VI-7, VI-23, VI-26– VI-28, VI-30, VI-31, VI-39).

Policy C/OS 3.2: Low-Impact Development. Regulate the location, density, and design of development throughout the City in order to preserve topographic forms and to minimize adverse impacts on vegetation, water, and wildlife resources.

Goal 3. Protect heritage trees and human-made elements of the urban environment that reflect the City's history and contribute to the quality of life.

Goal 4. Expand the aesthetic and functional contributions made to the urban environment by public open spaces, trail systems, scenic roadways, and street trees and plantings.

Policy C/OS 6.1: Tree Preservation. Preserve heritage trees in accordance with the City's Heritage Tree Ordinance.

Policy C/OS 6.2: Replacement Planting. Require significant replacement planting when the removal of heritage trees is permitted.

Policy C/OS 6.3: New Development Requirements. Require the protection of heritage trees during construction activity; require that landscaping, buildings, and other improvements located adjacent to heritage trees be designed and maintained to be consistent with the continued health of the tree.

Policy C/OS 6.4: Tree and Stand Retention. Retain the maximum feasible number of trees and preserve the character of stands or groves of trees in the design of new or modified projects.

Policy C/OS 6.7: Street Tree Planting. Encourage the planting of new street trees throughout the City and especially in gateway areas such as Third Avenue, Fourth Avenue, El Camino Real (SR 82), Hillsdale Boulevard, and 42nd Avenue; encourage neighborhood participation in tree planting programs; explore non-City funded tree planting programs.

Policy C/OS 6.8: Street Tree Preservation. Preserve existing street trees; ensure adequate siting, selection, and regular maintenance of City trees, including neighborhood participation, for the purpose of keeping the trees in a safe and aesthetic condition.

Policy C/OS 9.1: Development Requirements. Require new developments to protect and enhance the character of scenic roadways and trails designated on Figure C/OS-4, including but not limited to treatment of signs and screening, land uses, and preservation of view corridors.

Policy C/OS 9.2: Enhancement of Gateways. Enhance all City gateways. In particular, create a gateway statement at Third Avenue/US 101, J. Hart Clinton Drive at the Foster City limit, El Camino Real (SR 82) at Peninsula Avenue and 42nd Avenue, SR 92 at El Camino Real (SR 82), and Hillsdale Boulevard. (Note: Related Urban Design Policy UD-1.3.)

Implementation 13.6: Sustainability Practices. Utilize native and drought tolerant plant species to the greatest extent possible where compatible with use and aesthetic considerations; employ efficient irrigation systems, including the use of reclaimed water where technically and economically feasible and expand the use of environmentally sustainable maintenance practices such as the City of San Mateo's adopted Integrated Pest Management policy. Expand efforts to improve recycling opportunities in all parks and implement trash reduction measures, especially during large community events.

City of San Bruno General Plan

Skyline College is within the San Bruno city limits. The San Bruno General Plan contains the following policies that apply to aesthetic resources (San Bruno 2009:2-19, 2-31, 4-2, 4-19, 4-21, 4-24, 8-20).

Land Use and Urban Design Element

Goal LUD-E. Ensure that new development, especially in residential neighborhoods, is sensitive to existing uses, and is of the highest quality design and construction.

Policy LUD-73. Require buildings with a continuous façade of 100 feet or longer to use non-reflective materials to minimize adverse impact of glare.

Transportation Element

The Transportation Element identifies Sharp Park Road as a San Mateo County- and locally-designated scenic roadway within 0.5 mile of Skyline College.

Goal T-C. Preserve and enhance the unique natural features that constitute San Bruno's scenic roadways, as well as the visual quality of major gateways into the city.

Policy T-25. Coordinate with Caltrans, San Mateo County, and adjacent cities in order to maintain a consistent approach in applying scenic conservation standards in roadway design, improvements, and maintenance.

Policy T-28. Recognize and protect the following as local T-28 scenic corridors: Skyline Boulevard, State Scenic Highway; Crystal Springs Road, County Scenic Road; Sharp Park Road, County Scenic Road; and Sneath Lane.

Policy T-32. Encourage design of public and private development to frame vistas of the Downtown, public buildings, parks, and natural features.

Open Space and Recreation Element

Figure 5-1 of the Open Space and Recreation Element identifies a trailhead, Sweeny Ridge trail, and an open space area south of Skyline College that connects the campus to the Golden Gate National Recreation Area (San Bruno 2009:5-9, 5-12, 5-14).

Policy OSR-7. As former Skyline College properties are developed for single-family residential neighborhoods, create an option (at the City's discretion) for development of parks and/or recreation facilities to serve San Bruno residents.

Policy OSR-37. Review and revise open space requirements in the City's Zoning Ordinance to provide adequate landscaped and open space areas for residents' and employees' use, and to enhance a project's exterior appearance.

Environmental Resources and Conservation Element

Policy ERC-10. Require incorporation of native plants into landscape plans for new development as feasible—especially in areas adjacent to natural areas, such as canyons or scenic roadways (Figure 6-1). Require preservation of mature trees, as feasible, during design and construction.

Policy ERC-11. Prohibit the use of any new non-native invasive plant species in any landscaped or natural area. Develop a program for abatement of non-native invasive species in open space or habitat areas.

Public Facilities and Services Element

Policy PFS-66. Enforce landscape requirements that facilitate efficient energy use or conservation, such as drought-resistant landscaping and/or deciduous trees along southern exposures.

City of San Bruno Municipal Code

The San Bruno Municipal Code contains the following zoning ordinances for heritage trees and architectural review that apply to aesthetic resources (San Bruno 2015).

Heritage Trees

The Heritage Tree Ordinance provides standards for tree permits required for actions affecting trees, identifying heritage trees, measures to protect heritage trees, and replacement requirements.

Section 8.25.010, *Purpose*, of the Heritage Tree Ordinance identifies the purpose of this ordinance.

> The city has been forested with a variety of healthy and valuable trees, the preservation and reforestation of which is necessary for the health, safety and welfare of the citizens of this city in order to preserve the scenic beauty and aesthetic values of the community; maintain property values; prevent erosion of topsoil; protect against flood hazards and the risk of landslides; counteract the pollutants in the air; maintain the climatic balance and decrease wind velocities; and relieve the public costs of installing and maintaining stormwater drainage systems.

Architectural Review

Section 12.108.040, *Issuance—Conditions*, of the Architectural Review Permits Ordinance identifies that the architectural review committee will review proposed development site plans, plans for buildings and other structures, and landscape plans to ensure the property is developed in a manner that "proposed development will not excessively damage or destroy natural features, including trees, shrubs, creeks and rocks, scenic corridors, and the natural grade of the site."

3.1.3 Environmental Setting

3.1.3.1 Cañada College AVE

The Cañada College campus sits on top of a hill above the surrounding valleys of the Santa Cruz Mountains in the town of Woodside and Redwood City. Topography on the campus increases in elevation from Farm Hill Boulevard, and the developed portion of the campus is located near the top of the hillside. The campus is developed with residential and educational buildings, internal roadways and parking areas, outdoor leisure and recreation areas, and ancillary structures to support campus operations.

Buildings on campus are generally two stories, with the exception of the Cañada Vista on-campus housing development, which includes two U-shaped, three-story residential buildings in the northeastern portion of the campus. The larger buildings on campus are generally lighter in color, ranging from white to tans with sienna accents, with the exception of the Cañada Vista housing development, which has more earth-colored browns and beige colors.

The campus is served by I-280 at Farm Hill Boulevard, which borders the college campus to the south. I-280 is a designated state scenic highway under the California Scenic Highway Program from the Santa Clara County line to the northern city limit of the San Bruno (California Department of Transportation 2015). In addition, Cañada Road is designated as a scenic roadway by San Mateo County and the Town of Woodside.

Viewers within this AVE are limited to freeway viewers along I-280, recreational viewers from Barkley Fields and Park, viewers from the internal college campus, and unaffected viewers. The sensitivity of these viewers to visual change ranges from high sensitivity (recreational viewers) to moderate sensitivity (travelers on local roadways, viewers at the college) to low sensitivity (travelers on freeways). Unaffected viewers are viewers in proximity to the college, but do not have views of proposed changes due to position in the landscape and intervening landforms, structures, and vegetation.

Surrounding developed areas are generally characterized as rural and single-family residential with single-family homes on medium- to large-sized lots. Hillsides with mature trees and changes in topography are common in the area, and residential streets are typically curvilinear and interior, with limited connections to primary roadways. Generally, views from surrounding residential areas are unavailable due to the campus' location at the top of a steep hill. Homes adjacent to the campus to the west are located at the bottom of the slope, and their views towards the campus include an undeveloped hillside. Areas immediately north of the campus include a dense cluster of large mature trees, followed by the Emerald Hills Golf Course, and views of the campus from the north are not available. Similarly, residential areas east of the campus (and east of Farm Hill Boulevard), as well as residences south of I-280 (although it is a north-south highway, I-280 runs east-west just south of the campus), do not have direct views of the campus.

Freeway views from I-280 generally do not include views of Cañada College due to a large berm between the campus and I-280, restricting views as viewers approach the college. However, as viewers cross Farm Hill Boulevard heading southbound on I-280, there are brief views of Buildings 5 and 6. In addition, there are brief views of the on-campus housing and the existing Building 1, Gymnasium, along a 700-foot stretch of northbound I-280 before the Farm Hill Boulevard exit. However, intervening trees and hillsides preclude direct and full views of the campus from this location. Cañada Road, a County- and locally-designated scenic roadway, only has a very brief, passing view of Buildings 5 and 6 due to intervening topography, vegetation, and development that prevents additional views. There are no other designated roadways or scenic vistas near the campus that include views of Cañada College, including views from locally-designated roadway Alameda de las Pulgas, which occurs about 1 mile northeast of the campus, as views are blocked by topography and mature trees.

Views from Barkley Fields and Park consist of an undeveloped hillside with scattered mature trees (e.g., oaks) and the solar farm. Some development on the campus is visible from the park, including the top half of the existing Building 1, Gymnasium, the on-campus housing, several fences related to on-campus athletic fields, internal campus street lighting, some solar panel development, and part of one ancillary campus maintenance building.

The AVE is fairly well-lit at night and ambient sky glow currently radiates from the area. Existing sources of nighttime lighting include interior and exterior lighting associated with the college and residential land uses, in addition to lighting associated with the parking lot of Barkley Fields and Park. High-intensity, stadium lighting is not used at the park. Street lighting and light from vehicle headlights also add to the amount of nighttime light present within the AVE.

3.1.3.2 College of San Mateo AVE

The CSM campus is situated in the San Mateo hills about 3.5-miles west of the San Francisco Bay at the northern edge of the Silicon Valley. The campus is located within the southwestern portion of the city of San Mateo and is adjacent to the town of Hillsborough and unincorporated San Mateo County to the north and west, respectively. Regional access is provided along SR 92, which connects I-280 with US 101. Local access is provided by West Hillsdale Boulevard. The campus is developed along a hillside that increases in elevation from SR 92. Large mature trees exist throughout the campus and along the hillsides, partially obscuring views of the developed portions of the campus. Peninsula Golf and Country Club is located about 0.25 mile northeast of the campus on the opposite side of SR 92 and does not have views of the college campus. The primary access road along West Hillsdale Boulevard is also lined with trees and a central tree-

lined median. CSM is developed with a variety of buildings that range between one and four stories. Buildings developed on campus are generally lighter in color, and many buildings are dominated with large glass windows.

Expansive and distant 360-degree scenic vista views of the San Francisco Bay, the city of San Mateo, and surrounding hillside areas are available throughout the campus. The areas surrounding the campus are primarily residential, and consist mostly of single-family homes. Dense vegetation occurs between the campus and residential areas to the north, east, and west. Views onto the campus are limited from the nearest public roadways to the campus, such as Tobin Clark Drive and Sugar Hill Drive. From a distance, many homes in the surrounding communities to the north, east, and west can see some existing lights and buildings on the campus. From most of Tobin Clark Drive, views are generally blocked by existing residential development, residential landscaping, topography, and trees surrounding the campus; however, some views of the College Center building and parking lots are available from an approximately 250-foot segment where there is no existing development or large landscaping between the campus and the street. From Sugar Hill Drive, views of parking lots and parking lot and street lights and limited views of portions of Building 36 in the North Gateway portion of the campus can be seen along a segment of the roadway where there is a grassy slope downhill from the road, with no trees immediately adjacent to the road. Therefore, where scenic vista views are available from Tobin Clark Drive and Sugar Hill Drive, such vantages do not include views of the college campus but are scenic vista views of the surrounding San Francisco Bay Area. The CSM campus is generally buffered from surrounding areas due to its position at the top of a hill and landscaping; visual access from outside the campus is limited. Also, commercial development immediately southeast of the campus further prohibits views into the existing campus from areas along SR 92 and farther south.

Viewers within this AVE include many residential viewers, roadway viewers, viewers who attend or work at the college, and unaffected viewers. The sensitivity of these viewers to visual change range from high sensitivity (residents) to moderate sensitivity (viewers at the college) to with low sensitivity (unaffected viewers). Unaffected viewers are viewers in proximity to the college but they do not have views of proposed changes due to position in the landscape and intervening landforms, structures, and vegetation.

Crystal Springs Road, Alameda de las Pulgas, SR 92, and Polhemus Road are designated as scenic roadways by San Mateo County and the City of San Mateo. They are located within 0.5 mile of the campus. Crystal Springs Road, Alameda de las Pulgas, and Polhemus Road do not have existing views of the campus due to distance, intervening topography and vegetation, or their orientation away from the campus. SR 92 is located just east of, and bordering, the campus. However, visual conditions along SR 92 do not include views of CSM as views of the campus are obscured by hillsides along the road corridor and between the campus, vegetation, and multi-story commercial development (e.g., Solar City) located between SR 92 and the campus.

The AVE is well-lit at night and ambient sky glow currently radiates from the area. Existing sources of nighttime lighting include interior and exterior lighting associated with the college and residential and commercial land uses. Existing parking lot lights, building lights, and headlights from cars traveling on campus are currently visible from various places below the campus and also from some private residences to the north, east, and west and public roadways. Street lighting also adds to the amount of nighttime light now present within the AVE.

3.1.3.3 Skyline College AVE

The Skyline College campus is located in San Bruno, just east of the ocean side city of Pacifica. Regional access to the college is provided via SR 35, and local access is from Sharp Park Road and College Drive. Topography at and surrounding the immediate vicinity of the campus is relatively flat and generally slopes downward from the campus towards the City of Pacifica and the Pacific Ocean. The campus is developed with outdoor recreation facilities on the eastern portion and education buildings on the western portion. Existing buildings are generally two or three stories high and tan colored. Expansive and distant western scenic vista views towards the Pacific Ocean are available along the western edge of the campus that include steep vegetated slopes and cliffs that extend into the ocean. Scenic vista views are available from nearby hillsides and trails that include glimpses of the campus and the hillside upon which the college is built. However, views of the hilly terrain, oceanside development, and the ocean beyond are the primary focus of scenic vista views. The college and its associated buildings are not dominant visual features within scenic vista views. This is because there are no distinct visual elements on the campus that draw a viewer's attention toward the college due to the visual quality of the surrounding setting, and because views of the college are partially obscured by mature trees and surrounding development.

Viewers within this AVE include residential viewers, roadway viewers, recreational viewers, viewers who attend or work at the college, and unaffected viewers. The sensitivity of these viewers to visual change ranges from high sensitivity (residents, recreational viewers) to moderate sensitivity (travelers on local roadways, viewers at the college) to low sensitivity (travelers on freeways).

Unaffected viewers are viewers in proximity to the college, but they do not have views of proposed changes due to position in the landscape and intervening landforms, structures, and vegetation.

The areas surrounding the campus include a mix of residential, recreational, and institutional uses. The San Bruno Complex of the San Francisco County Jail is immediately southeast of the campus and includes several three-story tan buildings. The Pacific Heights Middle School building, which is located adjacent to and north of the campus along Chilton Lane, has been owned and operated by the District for college purposes since 2001. Residential single-family development is to the north and east of the campus, and areas immediately adjacent to the southern and western edge of the campus are largely undeveloped due to steep topography. Residential areas surrounding the campus are generally hilly, and existing development and landscaping do not preclude many views onto campus. There are some views onto the campus from the Marisol development (to the northeast of campus) and from Chilton Lane near its intersection with Pacific Heights Boulevard, which does not include any development between the roadway and the campus. Some limited views of the recreational facilities (e.g., track and field) are available from residential street Bering Drive, and views onto a large undeveloped flat area south of the track and field are available from the rear yards of homes that abut College Drive north of Sheryl Drive.

Hiking trails extend west and south of the campus and connect to larger established trails (Sweeney Ridge Trail and Mori Ridge Trail) that travel for miles to the south and west into Pacifica and the San Francisco State Fish and Game Refuge. While hikers and other pedestrians along these trails south of campus have valuable views to the west and east, views towards the campus are limited due to a high ridgeline with large trees between the campus and the trail system.

Sharp Park Road is designated as a scenic roadway by San Mateo County and the City of San Bruno. It connects SR 1 along the coast with SR 35, about 0.3 mile north of the campus. Existing views towards the campus do not include any existing development.

The AVE is well-lit at night and ambient sky glow currently radiates from the area. Existing sources of nighttime lighting include interior and exterior lighting associated with the college and residential land uses that are located north and east of the campus. Street lighting and light from vehicle headlights also add to the amount of nighttime light present within the AVE. However, Sweeny Ridge and the open space area south of the campus is undeveloped and lacks lighting, contributing to a lower level of nighttime lighting in the AVE compared to more developed areas.

3.1.4 Impacts Analysis

3.1.4.1 Methodology

Using the concepts and terminology described in Section 3.1.1, and criteria for determining significance described below, analysis of the visual effects of the Project are based on the following information.

- Direct field observation from vantage points, including neighboring buildings, property, and roadways (May 14, 2015).
- Photographic documentation of key views of and from the campuses.
- Evaluation of regional visual context.
- Review of Project construction drawings.
- Review of the Project in regard to compliance with state and local ordinances and regulations and professional standards pertaining to visual quality.
- Review of photo simulations to assess visual impacts.

Photo Simulations

Computer-generated visual simulations were produced using digital photographs and computer modeling and rendering techniques to document and evaluate the visual changes that would result from implementation of the Project. Simulation vantage points (VPs) were selected to provide representative public views from which specific Project elements would be most visible. Five vantage points were selected for simulating project features. A map of the simulation locations is shown in **Figure 3.1-1**, and the simulations themselves are shown in **Figures 3.1-2** through **3.1-7**. The before and after photo simulations provide clear images of the location, scale, and visual appearance of alternative features.

To determine the location of photo simulations, existing views towards the three campuses were evaluated based on desktop reviews of the surrounding scenic resources, scenic highways, and scenic roadways and further refined during site visits to each campus in May 2015. As a result of the photo reconnaissance, no key views of CSM were included, as there were no notable vantage points where views are considered to be highly sensitive or where proposed changes would be highly noticeable to a significant number of viewers. Therefore, no photo simulations were prepared for CSM. Through this process, however, sensitive vantage points were determined to be present for Cañada College and Skyline College. Sensitive vantage points for Cañada College and Skyline College



Graphics...00234.15 (7-8-2015)

Figure 3.1-1
Simulation Location Map for Cañada College and Skyline College



Graphics... 0023415 (7-8-2015)

Figure 3.1-2
Cañada College Kinesiology/Wellness Building
Existing and Simulated Views from VP-1, Barkley Fields and Park



Source: BCA Architects 2015.

Graphics... 0023415 (6-15-2015)

Figure 3.1-3
Cañada College Kinesiology/Wellness Building
Existing and Simulated Views from VP-2, I-280



Graphics... 0023415 (6-15-2015)

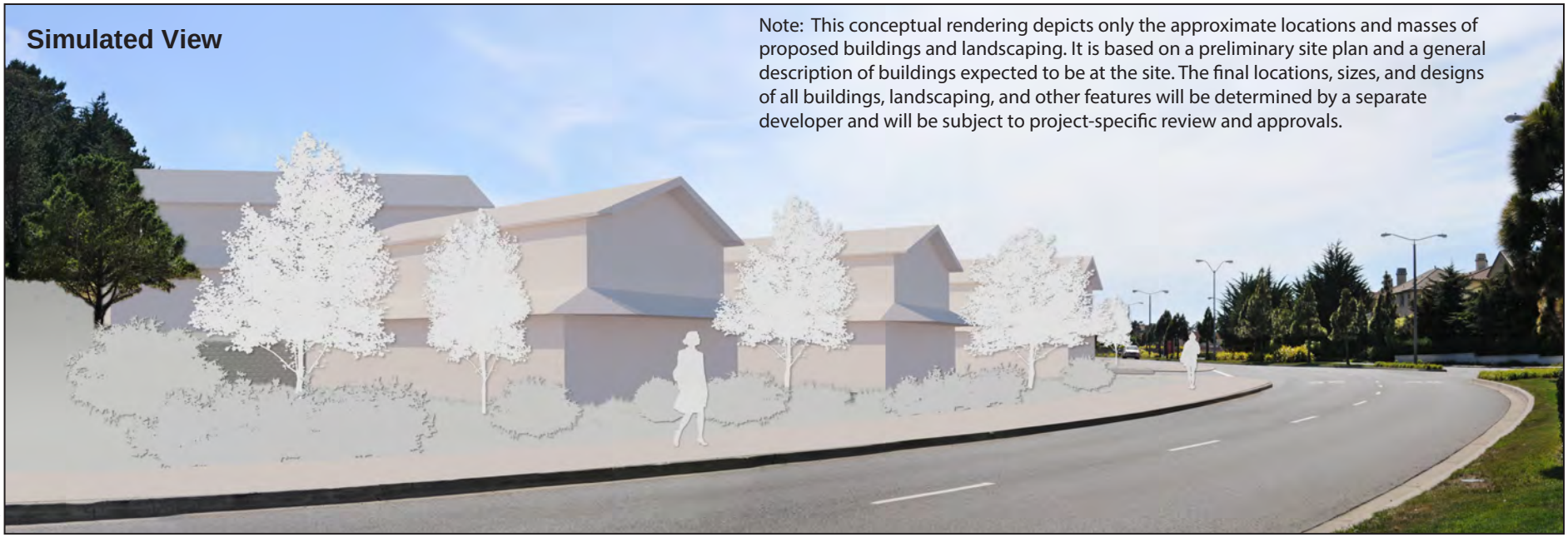
Figure 3.1-4
Cañada College Kinesiology/Wellness Building
Existing and Simulated Views from VP-3, I-280



Graphics... 0023415 (7-15-2015)

Figure 3.1-5
Cañada College Kinesiology/Wellness Building
Existing and Simulated Views from VP-2, I-280 at Night





Graphics... 0023415 (7-8-2015)

Figure 3.1-6
Skyline College Residential Housing
Existing and Simulated Views from VP-1, College Drive



Graphics... 0023415 (7-8-2015)

Figure 3.1-7
Skyline College Environmental Science Building
Existing and Simulated Views from VP-2, Sharp Park Road

were evaluated. Locations that were representative of the highest degree of change to sensitive resources and sensitive viewers were selected for simulation because such views can be used to evaluate impacts on locations with a lower degree of change to sensitive viewers, based on order of magnitude. Therefore, the selected key VPs are representative of the impacts that would likely result from the Project. The three key VPs of Cañada College and two VPs of Skyline College are mapped on **Figure 3.1-1** and include the following views.

- **Cañada College VP-1: Barkley Fields and Park**. Cañada College VP-1 is located at 5001 Farm Hill Boulevard, immediately east of the campus. Cañada College VP-1 looks west from Barkley Fields and Park, and views include the hillside upon which the college is built. Barkley Fields and Park is the only municipal park within Woodside and has play structures and a soccer/baseball field. The park is open to the public from sunrise until one-half hour after sunset. Amenities at the park also include bleachers, a restroom, and a parking lot.
- **Cañada College VP-2: I-280**. Cañada College VP-2 is located on the northbound lane of state scenic highway I-280, approximately 0.17 mile south of the Farm Hill Boulevard exit and the campus. Cañada College VP-2 looks northwest, and views include the hillside upon which the college is built and the existing Building 1, Gymnasium.
- **Cañada College VP-3: I-280**. Cañada College VP-3 is located on the northbound lane of state scenic highway I-280, approximately 0.2 mile south of the Farm Hill Boulevard exit. Cañada College VP-3 looks northwest and views include the hillside upon which the college is built and the existing Building 1, Gymnasium.
- **Skyline College VP-1: College Drive**. Skyline College VP-1 is located on College Drive, west of Marisol Drive. Skyline College VP-1 looks south and views include an undeveloped portion of the far eastern edge of the Skyline College campus referred to as Surplus Parcel B.
- **Skyline College VP-2: Sharp Park Road**. Skyline College VP-2 is located on the northbound lane of County- and locally-designated scenic roadway Sharp Park Road, near its intersection with Gypsy Hill Road. Skyline College VP-2 looks east and views include the undeveloped hillsides southwest of the Skyline College campus.

For Cañada College, simulations of the new Building 1, Kinesiology/Wellness, were prepared using a 3D SketchUp model of the proposed structure prepared by the architect. Renderings of the model from Cañada College VP-1 and VP-2 were exported from SketchUp and combined with photos of existing conditions in Adobe Photoshop to produce the simulation images.

For Skyline College, conceptual rendering of the Skyline College Residential Housing site (Skyline College VP-1) was based only on a preliminary site plan and a general description of buildings expected to be at the site. It is anticipated that the architecture would be similar to that of the Marisol Housing development. Specific locations and appearances of all building, road, and landscape features at the residential housing site are yet to be determined; therefore, an illustrative, rather than photo-realistic, style was used in that rendering. The simulation of the Skyline College Building 12, Environmental Sciences, (Skyline College VP-2) was prepared using an architectural rendering of the proposed building prepared by the architect. That rendering was merged with the existing conditions photo using Adobe Photoshop.

The simulations were prepared using available designs. Some conceptual architectural designs have been prepared as of this writing. The analysis is based on the general development envelope of each building or facility. The project elements will continue to undergo design refinement through final

design stages. However, these refinements would not be expected to result in substantial differences in individual features that would affect the outcome of the visual effects analysis. Therefore, the simulations are considered appropriate and representative of the type and extent of possible visual changes to the study area.

3.1.4.2 Significance Criteria

The State CEQA Guidelines Appendix G (14 CCR 15000 et seq.) has identified significance criteria to be considered for determining whether a project could have significant impacts on existing aesthetic resources.

An impact would be considered significant if construction or operation of the Project would have any of the following consequences.

- Substantially degrade the existing visual character or quality of the site and its surroundings, including views from scenic vistas.
- Substantially damage scenic resources, including trees, rock outcroppings, and historic buildings within a state scenic highway.
- Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.

Professional Standards

Professional standards result from professional and direct expertise gained by staff working on visual analyses and consulting with other experienced staff, subconsultants, and clients on visual effects, including knowledge gained from public input on a broad range of projects. The effects listed below represent collective knowledge that is professionally agreed upon and represents common, general public concerns. According to professional standards, a project may be considered to have significant impacts if it would *substantially* have any of the following consequences.

- Conflict with local guidelines or goals related to visual quality.
- Alter the existing natural viewsheds, including changes in terrain.
- Alter the existing visual quality of the region or eliminate visual resources.
- Increase light and glare in the study area.
- Result in backscatter light into the nighttime sky.
- Result in a reduction of sunlight or introduction of shadows in community areas.
- Obstruct or permanently reduce visually important features.
- Result in long-term (i.e., persisting for 2 years or more) adverse visual changes or contrasts to the existing landscape as viewed from public areas with high visual sensitivity.

3.1.4.3 Impacts and Mitigation Measures

Cañada College

Impact CC-AES-1: Result in temporary visual impacts caused by construction activities (less than significant with mitigation)

As described in Chapter 2, *Project Description*, construction would be phased over several years, with no more than two of the major improvement projects taking place on the campus at the same time. The Project would introduce construction activities into viewsheds available to all viewer groups. While the overall preliminary Project schedule is approximately 5 years, individual improvement projects would occur over a shorter period of time. Minor construction tasks including building renovations, pedestrian improvements, parking expansions, renewable energy installations, and campus landscaping would be visible for a fairly short period of time. If these tasks take place within building interiors, then these activities would not be visible. Therefore, the new Building 1, Kinesiology/Wellness, and new Building 23, Math/Science/Engineering, would constitute the most major construction activities that would be visible while they are under construction. Once the exteriors are complete, which is expected to take approximately up to 3 years, interior finishing activities would not be visible.

Construction of the Project would create changes in views of and from the campus over the course of phased improvement projects. Construction traffic would access the campus via local roads connecting to the campus and would be visible in the foreground, in addition to staging areas and associated facilities. Construction activities would introduce considerable heavy equipment and associated vehicles, including backhoes, compactors, tractors, and trucks into the viewsheds of all viewer groups. However, viewers are accustomed to seeing heavy machinery related with construction on the campus and in the vicinity and region associated with roadway improvements and development projects. Construction activities could result in slow moving dust clouds that would attract attention from visual receptors and reduce the availability of short-range views. **Mitigation Measure CC-AQE-5**, in accordance with environmental commitment EC-AIR-1, includes measures to reduce and control dust.

Many construction activities would be obscured by terrain, trees, and existing development. However, construction would still be visible, and viewers would see the visual transition of the site over time. Construction would take place Monday through Friday, between 6:00 a.m. and 7:00 p.m., and some construction may occur on weekends. Interior work at night would most likely not affect views because it would be inside the buildings, and lighting would be seen as standard interior lighting. However, because daylight hours vary by season, exterior construction activities could result in a substantial amount of nighttime lighting to operate in the dark if construction occurs past daylight hours in the late fall and winter.

Mitigation Measure CC-AES-1 would restrict construction to daylight hours within 0.25 mile of sensitive residential viewers, ensuring that high-intensity lighting for nighttime construction would not be needed.

The area is well-developed, viewers are accustomed to seeing construction in the area, many views of construction would be screened, and individual improvement Projects would not result in visible construction activities lasting longer than 2 to 3 years.

With implementation of **Mitigation Measure CC-AES-1** and **Mitigation Measure CC-AQE-5**, which would reduce the potential for negative visual impacts that could result from construction, this impact would be less than significant.

Mitigation Measure CC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Cañada College

This measure is described under Impact CC-AQE-2 in Section 3.2, *Air Quality and Energy*.

Mitigation Measure CC-AES-1: Limit exterior construction activities to daylight hours at Cañada College within 0.25 mile of residences

The effect of nighttime construction light and glare on nearby residences will be minimized by limiting construction hours within 0.25 mile of residences. Construction activities, which are scheduled to take place between 6:00 am and 7:00 pm on weekdays, will be limited to daylight hours (which will vary according to season). Therefore, the construction hours will be adjusted during the seasons to ensure construction activities take place during daylight hours.

Impact CC-AES-2: Substantially degrade the existing visual character or quality of the site and its surroundings, including views from scenic vistas (less than significant with mitigation)

No designated scenic vistas are identified by Cañada College or in the Redwood City or Woodside general plans. There are no scenic vistas within the AVE. As such, there would be no impacts on scenic vistas as a result of the proposed improvements at Cañada College.

The proposed improvements at Cañada College would alter the existing visual character or quality of the campus. Under existing conditions, views within this AVE are largely dominated by foreground elements, such as on-campus residential buildings, the existing Building 1, Gymnasium, and landscaping and rolling terrain, greatly limiting available views toward the internal campus buildings. Middleground and background views are very limited because of the terrain and prominence of foreground elements obstructing such views. Of the identified projects in the *Facilities Master Plan Amendment* for this campus, the new Building 1, Kinesiology/Wellness, would be the most visible from surrounding areas as it would be situated towards the center of campus and closer to I-280 and Barkley Fields and Park. The modernization and renovation efforts at the Performing Arts Center (Building 3), Library/Student Resource Center (Building 9), Multi-Disciplinary Instructional Center (Building 13), and two Instructional buildings (Buildings 16 and 18), in addition to the pedestrian improvements, two parking lot expansions, and installation of renewable energy upgrades, would not be visible from offsite areas. Viewers internal to the campus would have views of these improvements, which is considered consistent with ongoing development of an operating college, and would not significantly affect the existing visual character or quality of the campus. Once the Project is completed, the existing visual character of the Project area as a hillside community college campus would not be substantially changed or noticed from most vantages available from surrounding areas. However, views from Barkley Fields and Park and I-280 would be affected.

At Barkley Fields and Park, elements in the immediate foreground are prominent, such as play structure equipment, ornamental trees, grassy areas associated with the ball fields, and fencing. Middleground views toward surrounding hillsides, which are mostly vegetated, are visible and provide for scenic middleground views. Views in this area near the park are orderly and exhibit care in maintenance and are back-dropped by the scenic hills. Foreground and middleground views,

however, are encroached upon by structures and utilities, degrading the visual coherence and compositional harmony of the landscape as a whole and contributing to a moderate-high visual quality of views available from the park. As shown on **Figure 3.1-2**, foreground views of the college are available from the park. From this vantage, Cañada College VP-1, viewers can see some developed portions of the campus. The most prominent visual features in this view include the on-campus housing, the existing Building 1, Gymnasium, the hillside, and mature trees. Cañada College VP-1 is considered to have moderate visual quality. Viewers at the park are likely to focus their attention on these immediate foreground views within the park and are less likely to be focused on longer-range foreground views of the campus. However, local residents and other visitors of the park are expected to visit for extended periods of time and on a frequent basis, as this is the town's only park. Therefore, visitors are expected to be sensitive to changes in views associated with Cañada College VP-1.

As shown in **Figure 3.1-2**, the new Building 1, Kinesiology/Wellness, would be visible from the park. The new building occupies the same location as the existing building, but has a larger footprint. The new building has angular walls and more windows, and would be wider than the existing structure from this vantage. Implementation of **Mitigation Measure CC-AES-2** would aid in offsetting the apparent scale and visibility of the building by helping it to better recede into the view and make the proposed building less visible than the existing building. In addition, while the campus is not under jurisdiction of the Town of Woodside, Woodside's general plan Policy LU1.3—*Maintain Community Aesthetics*—would encourage new development to use earth tones or natural finishes so that buildings blend with the surrounding natural landscape. Therefore, implementation of **Mitigation Measure CC-AES-2** would ensure that the new building is sensitive to its surrounding visual context.

Similarly, as shown in **Figure 3.1-3**, views from I-280 would change as the existing Building 1, Gymnasium, would be replaced with the new Building 1, Kinesiology/Wellness. The new building would be wider than the current gymnasium and the height would be approximately the same, or less than the current gymnasium. However, the modern architecture and additional windows in the new building would make it stand out more in the view, compared to the existing building. Implementation of **Mitigation Measure CC-AES-2** would aid in offsetting the apparent scale of the building by helping it to recede into the view better, making the proposed building less of a focal point than the existing building and ensuring that the new building is sensitive to its surrounding visual context of the town of Woodside. With implementation of **Mitigation Measure CC-AES-2**, the proposed building would barely be visible in the distance, as shown in **Figure 3.1-4**, and this impact would be less than significant.

Mitigation Measure CC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Cañada College

Buildings associated with the Project to be located within scenic vista views (new Building 1, Kinesiology/Wellness) will be designed in a manner that allows these features to blend with the surrounding built and natural environments so that these structures complement the visual landscape. The following measures will be applied.

- Visible roofing materials will be selected to balance aesthetics with energy performance and compliance with codes and standards using a color shade that is visually cohesive with and darker than the general surrounding natural area. Colors may be chosen from the U.S. Department of the Interior Bureau of Land Management (BLM) Standard Environmental Colors Chart CC-001: June 2008. The building designer will employ the use of color panels as

mock-ups which will be evaluated from key observation points during common lighting conditions (front versus backlighting) to aid in the appropriate color selection. Panels will be a minimum of 3 by 2 feet in dimension and will be evaluated from various distances, but within 1,000 feet, to ensure the best possible color selection. Color selection will be made for the coloring of the most prevalent season, and the intent is to match the panels to this surrounding coloring and pick a color that best fits. Choosing a shade that is darker will allow the surface to recede and blend within the visual landscape whereas a lighter color advances or is more apparent within the visual landscape.

- New building facades will be painted in earth tones to help buildings blend better within the natural setting. White and lighter beiges and tans, which would make buildings stand out and contrast against nearby darker tree canopies, will be avoided.

Impact CC-AES-3: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway (less than significant with mitigation)

Near the college, I-280 is a designated state scenic highway, and Cañada Road is designated as a scenic roadway by San Mateo County and the Town of Woodside. Per the Woodside General Plan, any project within 1,000 feet of the state-designated I-280 scenic highway is within a locally-designated scenic corridor.

Cañada Road has only a very brief, passing view of Buildings 5 and 6 due to intervening topography, vegetation, and development. There would be no changes in views from Cañada Road.

As shown in **Figure 3.1-3**, the proposed Math/Science/Engineering Building (Building 23) and development of the North Quad towards the northern edge of the campus would not be visible from the I-280 corridor. In addition, building renovations would mostly involve interior upgrades, and neither of the two proposed parking expansion areas would be visible from the I-280 corridor due to intervening topography and distance. However, views from I-280 would change by replacing the existing Building 1, Gymnasium, with the new Building 1, Kinesiology/Wellness Building.

The new Kinesiology/Wellness building would be larger than the existing building's bulk, scale, and somewhere similar and slightly lower than the existing building's height. The new building would occupy a wider footprint, have angular walls that widen the structure, and have more modern architecture and more windows than the existing building. This could make the new building stand out more in views seen from the state scenic highway, compared to the existing building. However, implementation of **Mitigation Measure CC-AES-2** would aid in offsetting the apparent scale and visibility of the building by helping it to recede into the view better, would make the proposed building less visible than the existing building and would ensure that the new building is sensitive to available views from the state scenic highway and its surrounding visual context. With implementation of **Mitigation Measure CC-AES-2**, the proposed building would barely be visible in the distance, and this impact would be less than significant.

In addition, new lighting to illuminate the pool could affect nighttime views from I-280, which are discussed in more detail under Impact CC-AES-4.

Mitigation Measure CC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Cañada College

This measure is described under Impact CC-AES-2.

Impact CC-AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area (less than significant with mitigation)

Existing sources of light and glare in the Project vicinity include general campus lighting from buildings, lit pathways, sports fields (safety lighting only—not competition lighting, which would be of a higher intensity), roadway and parking lots, light from vehicles traveling on internal and adjacent roadways, and street lights along Farm Hill Boulevard. Lighting associated with the Project would include new lighting at both proposed parking expansion areas and at the two proposed swimming pools adjacent to and east of the new Building 1, Kinesiology/Wellness.

Lighting at the parking expansion areas would include LED lighting for security, efficiency and reduced maintenance purposes. The lighting would be downcast and would be designed and installed in such a way as to minimize the amount of light spill onto adjacent areas. Impacts associated with parking lot LED lighting could affect sensitive residential receptors if not properly designed. Improperly designed and constructed lighting, LED or otherwise, can negatively affect humans by increasing nuisance light and glare. Increased ambient light glow is the result when proper design and construction measures are not applied and blue-rich white light lamps (BRWL) are used (International Dark-Sky Association 2010a, 2010b, 2015). District design and construction standards adequately address these issues by avoiding the use of BRWL fixtures and otherwise shielding lights. Applying these standards mitigate the potential for substantial source of nighttime light and glare that could otherwise adversely affect nighttime views in the area.

The proposed lighting at the swimming pools would also be downcast to minimize the amount of light spill and would be extinguished daily by 11:00 p.m. As shown in **Figure 3.1-5**, the proposed pool lighting would introduce a new source of lighting at the swimming pools that would result in a very slight increase in visible ambient light glow that would briefly be seen from I-280 above the existing tree canopies surrounding the campus. Similar changes could be visible to nearby residents. Views of this change in lighting are expected to be limited because most views of the college are buffered; however, where views to the campus are present, such lighting, if not properly designed, could draw attention to the campus and negatively impact those views, especially for sensitive viewers that are located closer to the campus. Therefore, lighting at the swimming pools could result in significant impacts if not properly designed. With implementation of **Mitigation Measure CC-AES-3,** effective screening and lighting design would reduce impacts. In addition, with implementation of **Mitigation Measure CC-AES-2**, a darker building color would be used that would help the building to recede better into nighttime views, improving nighttime views from I-280 compared to existing conditions.

Upgrades to existing buildings would not increase glare, and glare from new buildings is expected to be minimal, for the most part, due to the existing developed nature of the area, the presence of existing vegetative screening, and additional proposed campus landscaping that would further reduce glare. However, as shown in **Figures 3.1-3** through **3.1-5**, the windows on the new Building 1, Kinesiology/Wellness, face northbound traffic on I-280, which travels north past the campus at this location. Views of the building from southbound traffic are obscured by elevated terrain and trees along the freeway, which travels in a southward direction past the campus at this location. Because the new Building 1, Kinesiology/Wellness faces northbound traffic on I-280 and introduces large window surfaces, it has the potential to create reflective glare that could affect morning traffic traveling west as the sun rises in the east and this may be more pronounced in the fall and winter when lower sun angles increases the potential for such glare. Implementation of **Mitigation Measures CC-AES-3** and **Mitigation Measure CC-AES-4** would require minimum lighting standards and detailed analysis of glare and building design modifications to reduce glare.

Therefore, with implementation of **Mitigation Measures CC-AES-2, CC-AES-3,** and **CC-AES-4**, this impact would be less than significant.

Mitigation Measure CC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Cañada College

This measure is described under Impact CC-AES-2.

Mitigation Measure CC-AES-3: Apply minimum lighting standards at Cañada College

All artificial outdoor lighting will be limited to safety and security requirements, designed using Illuminating Engineering Society's design guidelines and in compliance with International Dark-Sky Association approved fixtures. All lighting is designed to have minimum impact on the surrounding environment and will use downcast, cut-off type fixtures that direct the light only towards objects requiring illumination. Shielding will be utilized, where needed, to ensure light pollution is minimized. Therefore, lights will be installed at the lowest allowable height and cast low-angle illumination while minimizing incidental light spill onto adjacent properties, open spaces, or backscatter into the nighttime sky. The lowest allowable illuminance level will be used for all lighted areas and the amount of nighttime lights needed to light an area will be minimized to the highest degree possible. Light fixtures will have non-glare finishes that will not cause reflective daytime glare. Lighting will be designed for energy efficiency and have daylight sensors or be timed with an on/off program. Lights will provide good color rendering with natural light qualities with the minimum intensity feasible for security, safety, and personnel access. Lighting, including light color rendering and fixture types, will be designed to be aesthetically pleasing.

LED lighting will avoid the use of blue-rich white light lamps and use a correlated color temperature that is no higher than 3,000 Kelvin (International Dark-Sky Association 2010a, 2010b, 2015). Wherever possible and pragmatic, the District will use fixtures and lighting control systems that conform to International Dark-Sky Associations Fixture Seal of Approval program. In addition, LED lights will use shielding to ensure nuisance glare and that light spill does not affect sensitive residential viewers.

Lights along pathways and safety lighting at building entrances and loading areas will employ shielding to minimize offsite light spill and glare and be screened and directed away from residences and adjacent uses to the highest degree possible. The amount of nighttime lights used along pathways will be minimized to the highest degree possible to ensure that spaces are not unnecessarily over-lit, while still maintaining minimum adequate lighting to provide necessary visibility for security. For example, the amount of light can be reduced by limiting the amount of ornamental light posts to higher use areas and by using hooded wall mounts or bollard lighting on travel way portions of pathways.

In particular, pool lighting will employ spill and glare control features to minimize off-site light pollution. Luminaires will be chosen for the ability to provide horizontal and vertical beam control for better control in directing what is illuminated. In addition, shielding, such as a visor, will be used to further direct light and reduce light spill and ambient light glow. Luminaires will also incorporate photometric reflector systems that are designed to reduce light pollution.

Technologies to reduce light pollution evolve over time and design measures that are currently available may help but may not be the most effective means of controlling light pollution once the Project is designed. Therefore, all design measures used to reduce light pollution will employ the technologies available at the time of Project design to allow for the highest potential reduction in light pollution.

Mitigation Measure CC-AES-4: Remediate the potential for hazard glare at new Kinesiology/Wellness building at Cañada College

Windows installed in the new Building 1, Kinesiology/Wellness, will be selected for their ability to minimize glare and specular highlighting. To the extent feasible, windows will be designed to effectively reduce the refractive index of protective glass windows.

College of San Mateo

Impact CSM-AES-1: Result in temporary visual impacts caused by construction activities (less than significant with mitigation)

Construction of the facility improvements at CSM would result in similar temporary visual impacts as described under Impact CC-AES-1 for the facility improvements to Cañada College, due to similar but fewer types and lesser intensities of proposed facilities and land uses.

The Project would introduce construction activities into viewsheds available to all viewer groups; and while the overall project schedule is approximately 8 years, individual improvement projects would occur over a shorter period of time. Modernization and renovation, renewable energy installations, and campus landscaping would be relatively minor construction tasks that would be visible for a fairly short period of time or would not be visible because activities would be occurring within building interiors. Therefore, the new Building 8, Gymnasium, and Building 19, Center for Innovation and Emerging Technologies, would constitute the most major construction activities that would be visible on campus while it is under construction.

Construction of the Project would create changes in views of and from the campus and could result in slow moving dust clouds and nighttime lighting.

The area is well-developed, viewers are accustomed to seeing construction in the area, many views of construction would be screened, and individual improvement projects would not result in visible construction activities lasting longer than 2 years. With implementation of **Mitigation Measure CSM-AES-1** and **Mitigation Measure CSM-AQE-5**, which would reduce the potential for negative visual impacts that could result from construction dust, this impact would be less than significant.

Mitigation Measure CSM-AES-1: Limit exterior construction activities to daylight hours at the College of San Mateo within 0.25 mile of residences

This mitigation is the same as Mitigation Measure CC-AES-1 described under Impact CC-AES-1, but would be implemented at the College of San Mateo.

Mitigation Measure CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at the College of San Mateo

This measure is described under Impact CSM-AQE-2 in Section 3.2, *Air Quality and Energy*.

Impact CSM-AES-2: Substantially degrade the existing visual character or quality of the site and its surroundings, including views from scenic vistas (less than significant)

As described above, the west side of CSM campus is generally buffered from surrounding areas by trees and landscaping. While there are views from many residences north, east, and west of the campus toward the North Gateway parking lots and amphitheater, much of the visual access from outside the campus is limited, creating a smaller AVE compared to the facility improvements at Cañada College and Skyline College. Also, commercial development immediately southeast of the campus further prohibits views onto the existing campus.

The improvements proposed at CSM include replacing one building to create the new Building 8, Gymnasium, and replacing two buildings to create the new Building 19, Center for Innovation and Emerging Technologies. These improvements would be located central to the campus and surrounded by other existing education buildings and is not anticipated to be viewed from offsite public areas. Within the campus, the proposed new buildings would appear as education-related buildings on an existing community college campus and are not anticipated to substantially degrade the visual character or quality of the campus.

Other proposed improvements at the campus include modernization and renovation of the Corporation Yard, which provides storage for vehicles and equipment. Modernization and renovation of the Corporation Yard would not be visible from surrounding residential areas. Lastly, a grove of eucalyptus trees, which are highly flammable, could be removed for fire safety. One such grove is located on the north slope below Perimeter Drive, southwest of Tobin Clark Drive. Removal of these trees could make views of the campus more apparent from locations along Tobin Clark Drive and other streets yet would open up public views to the surrounding San Francisco Bay Area. Existing native oaks growing nearby would be allowed to remain and would grow once the invasive eucalyptus are removed (tannins in the fallen bark and leaves of eucalyptus trees inhibit other plants under their canopies). The area would also be infilled with native trees and shrubs and mulched. If the eucalyptus were to remain and a fire occurred, their presence could facilitate a more large-scale visual change in the landscape due to their flammability, compared with a fire occurring in slower burning vegetation that would be easier to contain. Also, allowing native oak trees to grow and infilling a once monotypic tree stand with native trees and shrubs would increase visual diversity and improve visual conditions.

While the exact location and number of trees that could be removed is not known at this time, any removal or pruning is not anticipated to significantly adversely affect views from or of the campus. The public views from the campus of scenic resources like the San Francisco Bay and surrounding communities might be improved by thinning or removing trees in some areas. Views of the campus from public areas adjacent to the campus might be changed somewhat in that some of the facilities might become more visible. However, the campus as a whole is already visible from the surrounding communities, and merely being able to see the campus from any specific vantage point off the District's property is not considered a significant adverse impact.

While intermittent views of the campus and proposed changes could be available from some surrounding residential streets as a result of the proposed campus improvements, including some views along Tobin Clark Drive, the resulting visual changes are not anticipated to result in a substantial degradation to the existing visual character of the campus. Once the Project is completed, the existing visual character and quality of the site as a community college would remain similar to existing conditions, and impacts would be less than significant.

While some views of the campus are available from surrounding residential streets, there are no scenic vistas that have views of the campus. Because there are no scenic vistas that would be affected by the Project, this impact would be less than significant. No mitigation is required.

Impact CSM-AES-3: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway (no impact)

There are no designated state scenic highways within the vicinity of CSM. As discussed in Section 3.1.3, *Environmental Setting*, there are three designated state scenic highways in San Mateo County: I-280, SR 1, and SR 35. I-280 and SR 35 are located about 1.5 miles west of the campus, and SR 1 is more than 7 miles from the campus. Locally, Crystal Springs Road, Alameda de las Pulgas, SR 92, and Polhemus Road are San Mateo County- and City of San Mateo-designated scenic roadways near the Project area; however, as described in Section 3.1.3, no views of the proposed changes to the campus are available from any of these roadways. Therefore, there would be no impact.

Impact CSM-AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area (less than significant with mitigation)

Existing sources of light and glare on and near the campus that can be seen from nearby residences and local roadways where views permit include general campus lighting from buildings, lit pathways, sports fields, and parking lots; light from vehicles travelling on internal and adjacent roadways; and street lights along Perimeter Road. This includes lighting associated with parking lots, the amphitheater, and vehicles in the North Gateway campus area, as seen by residences north, east, and west of the campus. Upgrades to existing buildings would not increase glare, and glare from the new Building 8, Gymnasium, and Building 19, Center for Innovation and Emerging Technologies, is expected to be minimal due existing developed nature of the area, the presence of existing vegetative screening, and additional proposed campus landscaping that would further reduce glare. Some new lighting would be installed at the Corporation Yard for security and could create a new source of light that would adversely affect nighttime views in the area if not properly designed. Tree removal and pruning could remove vegetation that helps to screen existing and proposed sources of light. However, the area is already well-lit and the tree removal and pruning would not likely result in perceptible changes in existing light and glare. Furthermore, with implementation of **Mitigation Measure CSM-AES-4,** any new light fixtures installed as part of the Project would be compliant with "dark sky" standards and directed downward and with the minimal intensity necessary to achieve the safety and security standards desired by the District for a particular area so that new sources of light would not result in notable changes compared to existing levels. With implementation of **Mitigation Measure CSM-AES-2**, impacts would be less than significant.

Mitigation Measure CSM-AES-4: Apply minimum lighting standards at the College of San Mateo

This mitigation is the same as Mitigation Measure CC-AES-3 described under Impact CC-AES-4, but would be implemented at the College of San Mateo.

Skyline College

Impact SC-AES-1: Result in temporary visual impacts caused by construction activities (less than significant with mitigation)

Construction of the facility improvements at Skyline College would result in similar temporary visual impacts as described under Impact CC-AES-1 for the facility improvements to Cañada College, due to similar proposed facilities and land uses.

The Project would introduce construction activities into viewsheds available to all viewer groups, and while the overall Project schedule is approximately 10 years, individual improvement projects would occur over a shorter period of time. Modernization and renovation, pedestrian improvements, parking expansions, renewable energy installations, and campus landscaping would be relatively minor construction tasks that would be visible for a fairly short period of time or would not be visible because activities would be taking place within building interiors. Therefore, the four new buildings (Environmental Sciences, Social Science/Creative Arts, Boiler Room and Utilities Plant, and Career and Sustainable Technology) and the new 71-unit residential complex would constitute the most major construction activities that would be visible while they are under construction. The construction of each improvement is expected to be complete within 2 to 3 years. The Residential Complex could each take 2 years, if the District constructs the multi-family complex and a developer constructs the single-family development, as planned. Once the exteriors are complete, interior finishing activities would not be visible.

Construction of the Project would create changes in views of and from the Project area, could result in slow moving dust clouds, and nighttime construction that would attract attention from visual receptors and reduce the availability of short-range views.

The area is well-developed, viewers are accustomed to seeing construction in the area, many views of construction would be screened, and individual improvement Projects would not result in visible construction activities lasting longer than 3 years. With implementation of **Mitigation Measure SC-AES-1** and **Mitigation Measure SC-AQE-5**, which would reduce the potential for negative visual impacts that could result from construction, this impact would be less than significant.

Mitigation Measure SC-AES-1: Limit exterior construction activities to daylight hours at Skyline College within 0.25 mile of residences

This mitigation is the same as Mitigation Measure CC-AES-1 described under Impact CC-AES-1, but would be implemented at Skyline College.

Mitigation Measure SC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Skyline College

This measure is described under Impact SC-AQE-2 in Section 3.2, *Air Quality and Energy*.

Impact SC-AES-2: Substantially degrade the existing visual character or quality of the site and its surroundings, including views from scenic vistas (less than significant with mitigation)

Views from the campus are generally limited to the foreground by surrounding terrain, vegetation and bordering residential development, except near Pacific Heights Middle School and at Vista Point. At these locations, topography and lack of tall vegetation allows for views out and over the north, west, and southwest, toward the Pacific Ocean and Sweeney Ridge, which is part of the greater Santa Cruz Mountains. From some higher vantages near the campus, residences and roadway users have

eastern-facing background views of the San Francisco Bay where gaps in vegetation and development allow for such views. However, large mature trees off-site and development in the foreground limit the amount of background views available. Views to the north and northeast are limited to the foreground and include the adjacent developed hillsides, mature tree stands, and one- to three-story campus buildings. Similarly, southeastern and southern-facing views include developed parts of the college campus in the foreground, with views of the nearby residential development, to the east, along College Drive and College Road and the vegetated hillsides to the south.

Existing views from off-campus are generally limited to some residential areas, such as Chilton Lane near Pacific Heights Boulevard, Bering Drive at College Road, the Marisol housing development, and from the rear yards of homes that abut College Drive. This is because surrounding terrain, vegetation, and development act to limit views toward the campus and available views tend to be from residences and roadways located on the exterior edges of development, facing the campus.

The improvements associated with Skyline College would involve upgrades to the existing community college, including several new buildings internal to the campus (such as the Social Science/Creative Arts Programs Building, Boiler Room and Utilities Plant, and Career and Sustainable Technology), a new building on the west edge of campus (Building 12, Environmental Sciences), the potential development of up to 71 residences (including 47 single-family and 24 multi-family homes), and modernization and renovation efforts for three internal buildings. The character and quality of the proposed development would be similar to the existing college campus, and the proposed development would not represent a substantial degradation of the existing visual character or quality when seen by viewers on the campus and from surrounding areas. With the exception of homes that abut College Drive and Ross Way and homes in the Marisol development, residential views likely would not change, and impacts are anticipated to remain less than significant. However, views from College Drive looking west towards the proposed potential development of up to 71 residences would be affected.

As shown in **Figure 3.1-6**, immediate foreground views are dominated by a vacant dirt and gravel lot with low lying grasses. Distant foreground views include a tall stand of trees and a hill behind Surplus Parcel B, which prevent middleground and background views. Views to the right of the photograph include the adjacent residential development and ornamental landscaping and vegetation that obscure full views of the homes and reduce the apparent scale of the buildings. Views from Skyline College VP-1 exhibit a moderate level of visual quality. Foreground elements consist of intact natural elements that would not be considered to be especially vivid. Skyline College VP-1 represents the location where Project changes would be most noticeable from nearby residents. However, because Skyline College VP-1 occurs at a close distance to the campus, near existing residential development, and is not located along a designated scenic roadway or other known area where visual resources would be expected to be sensitive, views and visual quality from Skyline College VP-1 are considered to be moderately sensitive.

As shown in **Figure 3.1-6**, views would change from an undeveloped gently sloped lot with a stand of trees and a hill to that of a developed suburban residential development with street trees. Views to the stand of trees and hillside would be lost from the vantage point illustrated in the simulation. Some Marisol development residences would have views of the development. Additionally, some residences along Ross Way may have views of the development because they are located upslope of the proposed development. However, most views from residences along Ross Way would be obscured by existing mature trees located on the slopes behind the homes. Where views are available, they would primarily be from second story windows that would look out and over the site.

Available vantages from along Ross Way would not be substantially affected because they would be similar to existing views of existing development along College Drive, and this infill project would seem to be a visual extension of existing development. In addition, landscaping would be planted that would mature to buffer views of the proposed development. In general, the proposed development would be located adjacent to existing single-family residences and the existing college campus, blending with adjacent development, and would not represent a substantial degradation of the existing character or quality of the site and its surroundings. There are no identified scenic vistas or other scenic resources in the area that would be affected by the proposed housing development, and implementation of **Mitigation Measure SC-AES-3** would ensure the new residential development blends with the surrounding residential development.

The existing visual character and quality of views within the AVE could also be affected by the proposed Building 12, Environmental Sciences, which would be built at Vista Point on the west edge of the campus. The trail at Vista Point would not be greatly affected because vista views to the west would be maintained and unaffected. However, the new building could affect views toward the hillside from Sharp Park Road, as shown in **Figure 3.1-7**, from Skyline College VP-2. A lightly colored building would draw attention toward the structure and make it stand out against the darker natural colors of the trees, shrubs, and grasses on the hillside. Implementation of **Mitigation Measure SC-AES-2** would ensure that the Environmental Sciences building blends within views and would not stand out or degrade the visual quality of views.

As discussed above, the campus makes up visible portions of scenic vistas, but the campus is not a predominant focal point of vista views. Implementation of **Mitigation Measure SC-AES-2** would ensure that the Environmental Sciences building blends within scenic vista views and does not stand out or degrade the visual quality of vista views. Views of the campus from nearby parks, including Pacific Heights Park and Portola Highlands Park to the east, are precluded due to topography, intervening development, and distance.

With implementation of **Mitigation Measures SC-AES-2** and **SC-AES-3**, this impact would be less than significant.

Mitigation Measure SC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Skyline College

This mitigation is the same as Mitigation Measure CC-AES-2 described under Impact CC-AES-2, but would be implemented at Skyline College.

Mitigation Measure SC-AES-3: Ensure new residential development blends with existing residential development at Skyline College

New residential development at Skyline College will be designed in a manner that it is sensitive to and blends with adjacent residential development. As such, the new development will be designed to be consistent in height and massing to existing development. Façade treatments and landscaping will also be similar to ensure visual cohesion between new and existing development.

Impact SC-AES-3: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway (less than significant with mitigation)

There are no state scenic highways that would have views of the proposed improvements at Skyline College; however, views from County-designated scenic roads would be somewhat affected but would remain less than significant. As discussed in Section 3.1.3,*Environmental Setting*, there are three designated state scenic highways in San Mateo County: I-280, SR 1, and SR 35. I-280 is located about 1.25 miles east of the campus, and SR 1 is located about 1.25 miles west of campus. SR 35 is about 0.75 mile east of the campus. Due to the distance of all three state-designated scenic highways, no views would be affected.

Locally, Sharp Park Road is a County- and locally-designated scenic road located within 0.5 mile of the Project area. The majority of Sharp Park Road winds up the hillside from the City of Pacifica and connects with SR 35 just north of the Skyline College campus and is surrounded on either side by steep topography or mature trees that preclude views onto campus. Skyline College VP-2 was established along Sharp Park Road where there were some potential views of the campus, and represents the location most likely to view the proposed improvements to campus. As shown in **Figure 3.1-7**, the hillsides in the foreground include a mixture of low-lying grasses and shrubs with large mature trees towards the center of the view. A prominent ridgeline with some large trees is visible towards the top of the view and is contrasted with the sky above the ridgeline. No views of existing development, including the existing campus and surrounding developed areas, is available due to the lower elevations of the Skyline College VP-2 location; however, the existing campus is located just beyond the top of the ridge visible in Skyline College VP-2. Overall, views from Skyline College VP-2 exhibit a high level of visual quality because the view consists of highly vivid and intact natural elements. Skyline College VP-2 represents the location where Project changes would be most noticeable from Sharp Park Road; however, due to the short duration of views that would be available to a motorist travelling at driving speeds, viewers are considered to be moderately sensitive to changes in views seen from Skyline College VP-2 (**Figure 3.1-7**).

As shown in **Figure 3.1-7**, views from Skyline College VP-2 would be modified from the existing condition, which does not include any development along the ridgeline, to include a portion of the proposed Building 12, Environmental Sciences. It is anticipated that the other proposed campus improvements, including the Career and Sustainable Technology building, parking expansion, Social Science/Creative Arts Programs building, and the Boiler Room and Utilities Plant, if needed, would not be visible from Skyline College VP-2. While the proposed Environmental Sciences building would be introduced into a view that does not currently include any development, views from along Sharp Park Road towards the campus are generally unavailable due to intervening topography, vegetation, and the curvature of the road. Also, motorists travelling along Sharp Park Road are expected to be focused on the road ahead of them and no portion of view of the roadway would include views of the proposed Environmental Sciences building for any considerable duration. As such, a portion of the building would be seen from the County-designated scenic Sharp Park Road for a limited duration while travelling eastbound.

As shown in the simulation, lightly colored building would draw attention toward the structure and make it stand out against the darker natural colors of the trees, shrubs, and grasses on the hillside. The existing visual character and quality of views within the AVE could be affected by the proposed Environmental Science building that would be built at Vista Point. With implementation of **Mitigation Measure SC-AES-2,** the Environmental Science building would blend within views and would not stand out or degrade the visual quality of views, and this impact would be less than significant.

Mitigation Measure SC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Skyline College

This mitigation is the same as Mitigation Measure CC-AES-2 described under Impact CC-AES-2 but would be implemented at Skyline College.

Impact SC-AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area (less than significant with mitigation)

Existing sources of light and glare in the Project vicinity include general campus lighting from buildings, lit pathways, sports fields (safety lighting only—not competition lighting, which would be of higher intensity), and parking lots; light from vehicles travelling on internal and adjacent roadways; and street lights along College Road and various residential streets in the immediate vicinity of the campus. Upgrades to existing buildings would not increase glare, and glare from new buildings is expected to be minimal due existing developed nature of the area, the presence of existing vegetative screening, and additional proposed campus landscaping that would further reduce glare. New lighting would be installed within the campus and also with the proposed single-family residential development; however, the proposed lighting would be primarily for security purposes and would be downcast with limited light spill. However, impacts could be significant if proper shielding is not employed. With implementation of **Mitigation Measure SC-AES-4**, this impact would be less than significant.

Mitigation Measure SC-AES-4: Apply Minimum Lighting Standards at Skyline College

This mitigation is the same as Mitigation Measure CC-AES-3 described under Impact CC-AES-4 but would be implemented at Skyline College.

3.1.4.4 Cumulative Impacts

The cumulative context for aesthetics includes areas within and near the AVE that are slated for development at each campus. The projects occurring within and near the AVE include those identified in the planning horizon of the relevant general plans and associated specific and area plans, which all combine to affect visual resources. The relevant general plans include those for: San Mateo County, Redwood City, Woodside, San Mateo, and San Bruno.

Cumulative impacts for aesthetics would result when impacts of a project, when combined with cumulative impacts from other projects, would contribute to a substantial degradation or alteration of the existing visual character of the vicinity and regional context, associated scenic vista views, and views from scenic highways. Such views can be altered by extensive vegetation removal and landform alteration and the introduction of incompatible anthropogenic features, all which act to transform the visual landscape of the vicinity and the region as a whole. In addition, new sources of light can create light pollution and ambient glow that can affect nighttime views, for example, by reducing the amount of visible dark sky and stars and introducing nuisance light spill.

Development at each campus would result in the impacts on visual resources identified in Section 3.1.4.3, *Impacts and Mitigation Measures*, and would contribute to cumulative visual impacts in the area. These impacts include temporary visual changes as a result of construction activities, changes to scenic resources along scenic highways, changes in visual character and quality at the Project area, and changes in light and glare at the Project area and vicinity introduced from new lighting sources.

Buildout of the general plans and associated specific and area plans, as described above, have the potential to contribute similar impacts on aesthetic/visual resources. These impacts would also result from construction activities; the development of roadways, parking areas, and buildings; alteration of the area's visual character, and the introduction of new light sources that would change the visual resources in the area.

While construction activities are temporary, they would require the removal of trees and shrubs on the site, which would largely be offset by proposed campus landscaping. While construction would occur near sensitive visual receptors, the quality of available views would be affected for only a short time because the Project area is fairly small; furthermore, it is located in a developed area already accustomed to construction activities. Accordingly, construction would not result in a considerable contribution to cumulative impacts related to construction in the area.

At Cañada College, as described in Section 3.1.4.3, there are no scenic vistas that would be affected by the improvements that are part of the Project. The improvements would also minimally affect views from state scenic highways and County and local scenic roadways (I-280 and Cañada Road) because existing terrain, vegetation, and development buffer most views of the Project area. The proposed design of buildings and proposed campus landscaping ensure that the Project minimizes visual impacts to the degree possible, in the few locations limited views of the changes would be present, so that they are not cumulatively considerable. In addition, the campus is currently well-lit and the surrounding area is currently well-lit. However, lighting associated with the Project and the proposed pool lighting could increase the amount of nighttime lighting and could result in some contribution to cumulative impacts related to ambient light glow and light pollution in the area. However, **Mitigation Measure CC-AES-4** would reduce these impacts to a less-than-significant level.

At CSM, as described in Section 3.1.4.3, the area has rolling terrain and affords quality scenic vistas, and the Project affects a ridgeline view that is seen as a partial element within wider vista views. State scenic highways would not be affected, and the Project would also not affect views from County and local scenic roadways (Alameda de las Pulgas, Crystal Springs Road, Polhemus Road, and SR 92) because existing terrain, vegetation, and development buffer views of the Project area. The proposed design of buildings and proposed campus landscaping ensure that the Project minimizes visual impacts to the degree possible, in the few locations limited views of the changes would be present, so that they are not cumulatively considerable. In addition, the campus is currently well-lit and the surrounding area is currently well-lit. However, lighting associated with the Project could increase the amount of nighttime lighting and could result in a considerable contribution to cumulative impacts related to ambient light glow and light pollution in the area. However, **Mitigation Measure CSM-AES-2** would reduce these impacts to a less-than-significant level.

At Skyline College, Sweeny Ridge and the open space area south/southwest of the campus serves as a natural resource area that is generally protected from, and therefore limits, the southward expansion of residential development that is occurring and is likely to occur within and near the AVE. Therefore, the cumulative context for aesthetics includes areas within and near the AVE that are slated for development as open space areas to the south would remain largely untouched.

As described in Section 3.1.4.3, the area has rolling terrain and affords quality scenic vistas, and the Project affects a ridgeline view that is seen as a partial element within wider vista views. A lightly colored building would draw attention toward the structure and make it stand out against the darker natural colors of the trees, shrubs, and grasses on the hillside and negatively affect the

existing visual character and quality of views and impact scenic vistas. However, implementation of **Mitigation Measure SC-AES-2** would ensure that the proposed Environmental Sciences building blends within views and does not stand out or degrade the visual quality of views or negatively affect scenic vistas. Implementation of **Mitigation Measure SC-AES-3** would ensure the new residential development blends with the surrounding residential development. State scenic highways would not be affected and the Project would also not affect views from County and local scenic roadways (Sharp Park Road) because existing terrain, vegetation, and development buffer views of the Project area. **Mitigation Measure SC-AES-3** would also ensure that views from local scenic roadways are not affected.

The proposed design of buildings and proposed campus landscaping ensure that the Project minimizes visual impacts to the degree possible, in the few locations limited views of the changes would be present, so that they are not cumulatively considerable. In addition, the campus is currently well-lit and the surrounding area is currently well-lit. However, lighting associated with the Project could increase the amount of nighttime lighting and could result in a considerable contribution to cumulative impacts related to ambient light glow and light pollution in the area. However, **Mitigation Measure SC-AES-4** would reduce these impacts to a less-than-significant level.

The Project is located in an area that is already highly developed, many of the changes would not be visible, the project retains much of the existing character, and the Project uses design measures to reduce visual impacts. In addition, implementation of the mitigation measures would reduce the lighting impacts associated with the Project, making it blend better within its existing visual environment. Therefore, visual impacts resulting from the Project would not result in a cumulatively considerable contribution to the existing cumulative visual impact.

3.2 Air Quality and Energy

This section describes the regulatory and environmental setting for air quality and energy. It also describes impacts on air quality and energy that would result from implementation of the Project and mitigation for significant impacts, where feasible and appropriate.

3.2.1 Regulatory Setting

The following regulations are relevant to air quality and energy and apply to implementation of the Project on all three campuses, unless otherwise specified.

3.2.1.1 Federal

Air Quality

Clean Air Act and National Ambient Air Quality Standards

The federal Clean Air Act (CAA), promulgated in 1963 and amended several times thereafter, including the 1990 Clean Air Act amendments (CAAA), establishes the framework for modern air pollution control. The act directs the Environmental Protection Agency (EPA) to establish national ambient air quality standards (NAAQS) for the six criteria pollutants (discussed below). The NAAQS are divided into primary and secondary standards; the former are set to protect human health within an adequate margin of safety, and the latter to protect environmental values, such as plant and animal life. **Table 3.2-1** summarizes the NAAQS.

The CAA requires states to submit a state implementation plan (SIP) for areas in nonattainment for federal standards. The SIP, which is reviewed and approved by EPA, must demonstrate how the federal standards would be achieved. Failing to submit a plan or secure approval can lead to denial of federal funding and permits. In cases where the SIP is submitted by the state but fails to demonstrate achievement of the standards, EPA is directed to prepare a federal implementation plan.

Energy

Energy Policy Act of 2005

The Energy Policy Act of 2005 (EP Act) was intended to establish a comprehensive, long-term energy policy and is implemented by the U.S. Department of Energy (U.S. DOE). The EP Act addresses energy production in the United States, including oil, gas, coal, and alternative forms of energy and energy efficiency and tax incentives. Energy efficiency and tax incentive programs include credits for the construction of new energy efficient homes, production, or purchase of energy efficient appliances, and loan guarantees for entities that develop or use innovative technologies that avoid the production of greenhouse gases (GHGs).

3.2.1.2 State

Air Quality

California Clean Air Act and California Ambient Air Quality Standards

In 1988, the state legislature adopted the California Clean Air Act (CCAA), which established a statewide air pollution control program. CCAA requires all air districts in the state to endeavor to meet the California ambient air quality standards (CAAQS) by the earliest practical date. Unlike the federal CAA, the CCAA does not set precise attainment deadlines. Instead, the CCAA establishes increasingly stringent requirements for areas that will require more time to achieve the standards. CAAQS are generally more stringent than the NAAQS and incorporate additional standards for SO_4 (sulfate), H_2S (hydrogen sulfide), and C_2H_3Cl (vinyl chloride) and visibility-reducing particles. The CAAQS and NAAQS are listed together in **Table 3.2-1**.

The California Air Resources Board (ARB) and local air districts bear responsibility for achieving California's air quality standards, which are to be achieved through district-level air quality management plans that would be incorporated into the SIP. In California, EPA has delegated authority to prepare SIPs to ARB, which, in turn, has delegated that authority to individual air districts. ARB traditionally has established state air quality standards, maintaining oversight authority in air quality planning, developing programs for reducing emissions from motor vehicles, developing air emission inventories, collecting air quality and meteorological data, and approving SIPs.

The CCAA substantially adds to the authority and responsibilities of air districts. The CCAA designates air districts as lead air quality planning agencies, requires air districts to prepare air quality plans, and grants air districts authority to implement transportation control measures. The CCAA also emphasizes the control of "indirect and area-wide sources" of air pollutant emissions. The CCAA gives local air pollution control districts explicit authority to regulate indirect sources of air pollution and to establish traffic control measures (TCMs).

Statewide Truck and Bus Regulation

Originally adopted in 2005, the onroad truck and bus regulation requires heavy trucks to be retrofitted with particulate matter (PM) filters. The regulation applies to privately and federally owned diesel fueled trucks with a gross vehicle weight rating (GWR) greater than 14,000 pounds. Compliance with the regulation can be reached through one of two paths: (1) vehicle retrofits according to engine year or (2) phase-in schedule. Compliance paths ensure that by January 2023, nearly all trucks and buses will have 2010 model year engines or newer.

State Tailpipe Emission Standards

To reduce emissions from off-road diesel equipment, onroad diesel trucks, and harbor craft, ARB established a series of increasingly strict emission standards for new engines. New construction equipment used for the Project, including heavy duty trucks and off-road construction equipment will be required to comply with the standards.

Table 3.2-1. National and State Ambient Air Quality Standards

Criteria Pollutant	Average Time	California Standards	National Standards[a]	
			Primary	Secondary
Ozone	1-hour	0.09 ppm	None	None
	8–hour	0.070 ppm	0.075 ppm	0.075 ppm
Particulate Matter (PM10)	24-hour	50 μg/m^3	150 μg/m^3	150 μg/m^3
	Annual mean	20 μg/m^3	None	None
Fine Particulate Matter (PM2.5)	24-hour	None	35 μg/m^3	35 μg/m^3
	Annual mean	12 μg/m^3	12.0 μg/m^3	15.0 μg/m^3
Carbon Monoxide	8-hour	9.0 ppm	9 ppm	None
	1-hour	20 ppm	35 ppm	None
Nitrogen Dioxide	Annual mean	0.030 ppm	0.053 ppm	0.053 ppm
	1-hour	0.18 ppm	0.100 ppm	None
Sulfur Dioxide	Annual mean	None	0.030 ppm	None
	24-hour	0.04 ppm	0.014 ppm	None
	3-hour	None	None	0.5 ppm
	1-hour	0.25 ppm	0.075 ppm	None
Lead	30-day Average	1.5 μg/m^3	None	None
	Calendar quarter	None	1.5 μg/m^3	1.5 μg/m^3
	3-month average	None	0.15 μg/m^3	0.15 μg/m^3
Sulfates	24-hour	25 μg/m^3	None	None
Hydrogen Sulfide	1-hour	0.03 ppm	None	None
Vinyl Chloride	24-hour	0.01 ppm	None	None

Sources: California Air Resources Board 2013.

Notes:

μg/m^3 = micrograms per cubic meter

ppm = parts per million

[a] National standards are divided into primary and secondary standards. Primary standards are intended to protect public health, whereas secondary standards are intended to protect public welfare and the environment.

Toxic Air Containment Regulation

California regulates toxic air contaminants (TACs) primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) (Hot Spots Act). In the early 1980s, with AB 1807, ARB established a statewide comprehensive air toxics program to reduce exposure to air toxics. The Hot Spots Act supplements the AB 1807 program by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks.

In August 1998, ARB identified particulate emissions from diesel-fueled engines as TACs. In September 2000, ARB approved a comprehensive diesel risk reduction plan to reduce emissions from both new and existing diesel-fueled engines and vehicles (California Air Resources Board 2000). The goal of the plan is to reduce diesel PM10 (respirable particulate matter) emissions and the associated health risk by 75% in 2010 and by 85% by 2020. The plan identifies 14 measures that target new and existing onroad vehicles (e.g., heavy-duty trucks and buses), off-road equipment (e.g., graders, tractors, forklifts, sweepers, and boats), portable equipment (e.g., pumps), and stationary engines (e.g., stand-by power generators). ARB will implement the plan over the next several years. Because ARB measures are enacted before any phase of construction, the Project would be required to comply with applicable diesel control measures.

The Tanner Act sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB designates a substance as a TAC. To date, ARB has identified 21 TACs, and has also adopted EPA's list of hazardous air pollutants (HAPs) as TACs. In August 1998, DPM was added to the ARB list of TACs (California Air Resources Board 1998).

The Hot Spots Act requires that existing facilities that emit toxic substances above specified levels take the following actions.

- Prepare a toxic emission inventory.
- Prepare a risk assessment if emissions are significant (i.e., 10 tons per year or on the District's Health Risk Assessment [HRA] list).
- Notify the public of significant risk levels.
- Prepare and implement risk reduction measures.

ARB has adopted several regulations that will reduce diesel emissions from in-use vehicles and engines throughout California. For example, ARB adopted an idling regulation for onroad diesel-fueled commercial vehicles in July 2004 and updated in October 2005. The regulation applies to public and privately-owned trucks with a GWR greater than 10,000 pounds. Vehicles subject to the regulation are prohibited from idling for more than 5 minutes in any one location. ARB also adopted a regulation for diesel-powered construction and mining vehicles operating. Fleet owners are subject to retrofit or accelerated replacement/repower requirements for which ARB must obtain authorization from EPA prior to enforcement. The regulation also imposes a 5-minute idling limitation on owners, operators, and renters or lessees of off-road diesel vehicles. In some cases, the particulate matter reduction strategies also reduce smog-forming emissions such as nitrous oxide (NO_X). As an ongoing process, ARB reviews air contaminants and identifies those that are classified as TACs. ARB also continues to establish new programs and regulations for the control of TACs, including diesel particulate matter, as appropriate.

Energy

California Environmental Quality Act, Appendix F Energy Conservation

CEQA requires EIRs to include a discussion of potential energy impacts and energy conservation measures. Appendix F, *Energy Conservation*, of the State CEQA Guidelines outlines energy impact possibilities and potential conservation measures designed to assist in the evaluation of potential energy impacts of proposed projects. Appendix F places "particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy," and further indicates this may result in an unavoidable adverse effect on energy conservation. Moreover, the State CEQA Guidelines state that significant energy impacts should be "considered in an EIR to the extent relevant and applicable to the project." Mitigation for potential significant energy impacts could include implementing a variety of strategies, including measures to reduce wasteful energy consumption and altering project siting to reduce energy consumption.

California Building Standards Code (Title 24, California Code of Regulations), including Energy Code (Title 24, Part 6) and Green Building Standards Code (Title 24, Part 11)

California first adopted the California Buildings Standards Code in 1979, which constituted the nation's first comprehensive energy conservation requirements for construction. Since this time, the standards have been continually revised and strengthened. In particular, the California Building Standards Commission adopted the mandatory Green Building Standards Code (CALGreen [California Code of Regulations, Title 24, Part 11]) in January 2010. CALGreen applies to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure.

The California Code of Regulations, Title 24, Part 6 (also known as the California Energy Code) and associated regulations in CALGreen were revised again in 2013 by the California Energy Commission (CEC). The 2013 Building Energy Efficiency Standards are 25% more efficient than previous standards for residential construction. Part 11 also establishes voluntary standards that became mandatory in the 2010 edition of the code, including planning and design for sustainable site development, energy efficiency (in excess of the CEC requirements), water conservation, material conservation, and internal air contaminants. The standards offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. The next update to the Title 24 energy efficiency standards will take place in 2016 and take effect in 2017.

Senate Bills 1078/107 and Senate Bill 2—Renewables Portfolio Standard

Senate Bill (SB) 1078 and SB 107, California's Renewables Portfolio Standard (RPS), obligates investor-owned utilities (IOUs), energy service providers (ESPs), and Community Choice Aggregations (CCAs) to procure an additional 1% of retail sales per year from eligible renewable sources until 20% is reached, no later than 2010. The California Public Utilities Commission (CPUC) and CEC are jointly responsible for implementing the program. SB 2 (2011) set forth a longer range target of procuring 33% of retail sales by 2020. Implementation of the RPS will conserve nonrenewable fossil fuel resources by generating a greater percentages of statewide electricity from renewable resources, such as wind, solar, and hydropower.

Assembly Bill (AB) 1881 (Chapter 559, Statutes of 2006)

Water conservation reduces energy use by reducing the energy cost of moving water from its source to its user. Assembly Bill (AB) 1881 (Chapter 559, Statutes of 2006) requires the Department of Water Resources (DWR) to adopt an updated model water efficient landscape ordinance (MWELO) and local agencies to adopt DWR's MWELO or a local water efficient landscape ordinance by January 1, 2010 and notify DWR of their adoption (Government Code Section 65595). The water efficient landscape ordinance would apply to sites that are supplied by public water as well as those supplied by private well. Local adoption and implementation of a water efficient landscape ordinance would reduce per capita water use from new development.

Senate Bill X7-7 (Chapter 4, Statutes of 2009)

SB X7-7 (Chapter 4, Statutes of 2009), the Water Conservation Act of 2009, establishes an overall goal of reducing statewide per capita urban water use by 20% by December 31, 2020 (with an interim goal of at least 10% by December 31, 2015). Reducing water use results in a reduction in energy demand that would otherwise be used to transport and treat water before delivery to the consumer.

Assembly Bill 2076—Reducing Dependence on Petroleum

The CEC and ARB are directed by AB 2076 (passed in 2000) to develop and adopt recommendations for reducing dependence on petroleum. A performance-based goal is to reduce petroleum demand to 15% less than 2003 demand by 2020.

Senate Bill 375—Sustainable Communities Strategy

See Section 3.6, *Greenhouse Gas Emissions*.

Assembly Bill 1493—Pavley Rules (2002, Amendments 2009, 2012 Rule-Making)

AB 1493 required ARB to adopt vehicle standards that will improve the efficiency of light duty autos and lower GHG emissions to the maximum extent feasible beginning in 2009. Additional strengthening of the Pavley standards (referred to previously as "Pavley II," now referred to as the "Advanced Clean Cars" measure) has been proposed for vehicle model years 2017–2025. Together, the two standards are expected to increase average fuel economy to roughly 54.5 miles per gallon by 2025. The improved energy efficiency of light duty autos will reduce statewide fuel consumption in the transportation sector.

3.2.1.3 Local

As stated in Section 2.6 of Chapter 2, *Project Description*, the District is exempt from the application of city and county zoning ordinances, except the proposed residential complex at Skyline College because it is a non-educational use. However, the current zoning and applicable general plan provisions for each campus are provided for informational purposes.

Air Quality

Bay Area Air Quality Management District/2010 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) has local air quality jurisdiction over projects in San Mateo County. Responsibilities of BAAQMD include overseeing stationary-source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required by CEQA. The air quality districts are also responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws and for ensuring that NAAQS and CAAQS are met.

The BAAQMD (2011a) has adopted advisory emission thresholds to assist CEQA lead agencies in determining the level of significance of a project's emissions, which are outlined in its *California Environmental Quality Act Air Quality Guidelines* (BAAQMD CEQA Guidelines). BAAQMD has also adopted air quality plans to improve air quality, protect public health, and protect the climate. The Bay Area 2001 Ozone Attainment Plan was adopted to reduce ozone and achieve the NAAQS ozone standard, and the 2010 Clean Air Plan was adopted to provide an integrated control strategy for ozone, PM, TACs, and GHG emissions. BAAQMD also adopted a redesignation plan for carbon monoxide (CO) in 1994. The redesignation plan includes strategies to ensure the continuing attainment of the NAAQS for CO in the San Francisco Bay Area Air Basin (SFBAAB).

The Project may be subject to the following district rules. This list of rules may not be all encompassing as additional BAAQMD rules may apply to the Project as specific components are identified.

- Regulation 2, Rule 2 (New Source Review). This regulation contains requirements for Best Available Control Technology and emission offsets.
- Regulation 2, Rule 5 (New Source Review of Toxic Air Contaminates). This regulation outlines guidance for evaluating TAC emissions and their potential health risks.
- Regulation 6, Rule 1 (Particulate Matter). This regulation restricts emissions of PM darker than No. 1 on the Ringlemann Chart to less than 3 minutes in any 1 hour.
- Regulation 7 (Odorous Substances): This regulation establishes general odor limitations on odorous substances and specific emission limitations on certain odorous compounds.
- Regulation 8, Rule 3 (Architectural Coatings): This regulation limits the quantity of volatile organic compounds (VOCs) in architectural coatings.
- Regulation 9, Rule 6 (Nitrogen oxides emission from natural gas-fired boilers and water heaters). This regulation limits emissions of NO_X generated by natural gas-fired boilers.
- Regulation 9, Rule 8 (Stationary Internal Combustion Engines). This regulation limits emissions of NO_X and CO from stationary internal combustion engines of more than 50 horsepower.

Energy

Redwood City General Plan

Several goals and a program of the Urban Form and Land Use Element of the general plan apply broadly to energy use, as follows.

Goal BE-22. Achieve land use patterns and development approaches that incorporate sustainability principles.

Goal BE-24. Be a regional leader with regard to sustainable development practices.

Program BE-26. Green Building Program – Implement a citywide green building program that requires innovative measures to create buildings that are more energy efficient, less water- and resource-intensive, and healthier for occupants through the Green Building Ordinance and other mechanisms.

Town of Woodside General Plan

Several goals and policies from the Sustainability Element of the general plan apply broadly to energy use, as follows.

Goal S1. Conserve resources.

Policy S1.1. Protect and conserve water resources.

Policy S1.2. Encourage and support renewable clean energy.

Goal S2. Reduce greenhouse gas emissions.

Policy S2.1. Encourage increased building energy efficiency.

Policy S2.2. Encourage the reuse of buildings and building materials.

Policy S2.4. Reduce vehicle trips.

Policy S2.5. Reduce carbon footprint of all town activities.

Goal S3. Encourage community education.

Policy S3.1. Encourage community programs and educational opportunities which promote sustainability.

Policy S3.2. Encourage sustainable town practices.

City of San Mateo General Plan

Several goals of the Land Use Element of the general plan apply broadly to energy use, as follows.

Goal 8a. Reduce greenhouse gas emissions each year consistent with the Sustainable Initiatives Plan.

Goal 8c. Ensure that all improvements to existing structures are developed or remodeled in a sustainable manner.

Goal 8d. Increase new annual installations of solar or renewable energy systems consistent with the Sustainable Initiatives Plan.

Goal 8e. Reduce citywide gross water consumption per capita to 102 gallons/day. Reduce the residential per capita to 70 gallons/day.

The following goal from the Circulation Element of the City's General Plan pertain to the Project.

Goal 6. Implement the transportation objectives of the Sustainable Initiatives Plan (SIP) adopted by the City Council and developed by the Sustainable Advisory Committee.

San Bruno General Plan

The general plan guides development and use of land within the City. Several goals, programs and policies of the Land Use & Urban Design Element of the general plan apply broadly to energy use, as follows.

Policy LUD-J. Coordinate planning and development with surrounding cities, agencies, and San Mateo County. Work toward solutions to regional problems of traffic congestion, open space preservation, noise attenuation, environmental hazards, affordable housing, pollution, and growth management.

The following goals, programs and policies from the Public Facilities Element of the City's general plan pertain to the Project.

Policy PFS-C. Ensure that the City's water supply systems are adequate to serve the city's present and anticipated needs, and that water conservation is implemented in all residences and businesses.

Policy PFS-J. Develop comprehensive programs to decrease energy consumption at the household, business, and City government level.

3.2.2 Environmental Setting

This section provides a discussion of the existing conditions related to air quality and energy in the study area. Information below is drawn from the relevant oversight agencies: BAAQMD, ARB, and EPA.

3.2.2.1 Climate/Atmospheric Conditions

While the primary factors that determine air quality are the locations of air pollutant sources and the amount of pollutants emitted from those sources, meteorological conditions and topography are also important factors. Atmospheric conditions, such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants. Unique geographic features throughout the state define fifteen air basins with distinctive regional climates. The air quality study area for the Project is located on the San Francisco Peninsula in the SFBAAB.

The peninsula region of the Bay Area extends from the area northwest of San Jose to the Golden Gate. The Santa Cruz Mountains, part of the Pacific Coast Ranges, extend up the center of the peninsula, with elevations exceeding 2000 feet at the south end, and gradually decreasing to 500 feet elevation in South San Francisco, where the mountain range terminates. On the west side of the mountains lie small coastal towns, such as Half Moon Bay and Pacifica, that due to coastal ocean upwelling and northwest winds, experience a high incidence of cool, foggy weather in the summer. On the east side of the mountain range lie the larger cities. Cities in the southeastern peninsula experience warmer temperatures and few foggy days because the marine layer, with an average depth of 1700 feet, is blocked by the 2000 foot ridge to the west. At the north end of the peninsula lies San Francisco. Because most of the topography of San Francisco is below 200 feet, the marine layer is able to flow across most of the city, making its climate cool and windy.

The blocking effect of the Santa Cruz Mountains can be seen in the summertime maximum temperatures. For example, at Half Moon Bay and San Francisco, the maximum daily temperatures in June through August are 62–64°F, while on the eastern side at Redwood City, the maximum temperatures are in the low 80s for the same period. Daily maximum temperatures throughout the peninsula during the winter months are in the high 50s. Large temperature gradients are not seen in the minimum temperatures. Average minimum temperatures at Half Moon Bay are about 43°F in winter, and 50–52°F in summer. The east peninsula, represented by Redwood City, reports winter minimum temperatures of 40°F, and summer minimum temperatures of 52–54°F.

Annual average wind speeds range from 5–10 mph throughout the peninsula. The tendency is for the higher wind speeds to be found along the western coast. However, winds on the east side of the peninsula can also be high in certain areas because low-lying areas in the mountain range, at San Bruno Gap and Crystal Springs Gap, commonly allow the marine layer to pass across the peninsula.

The prevailing winds are westerly along the peninsula's west coast. Individual sites can show significant differences, however. For example, Fort Funston in western San Francisco County shows a southwest wind pattern, while Pillar Point in San Mateo County to the south shows a northwest wind pattern. Sites on the east side of the mountains also show a westerly pattern, although their wind patterns show influence by local topographic features. That is, a few hundred feet rise in elevation will induce flow around that feature instead of over it during stable atmospheric conditions. This can change the wind pattern by as much as 90 degrees over short distances. On

mornings without a strong pressure gradient, areas on the east side of the peninsula often experience eastern flow in the surface layer, induced by upslope flow on the east-facing slopes and by the bay breeze. The bay breeze is rarely seen after noon because the stronger sea breeze dominates the flow pattern.

On the peninsula, there are two important gaps in the Pacific Coast Ranges. The larger of the two is the San Bruno Gap, extending from Fort Funston on the ocean side to the San Francisco International Airport on the bay side. Because the gap is oriented in the same northwest to southeast direction as the prevailing winds, and because the elevations along the gap are under 200 feet, marine air is easily able to penetrate into the bay.

The other gap in the Santa Cruz Mountains is the Crystal Springs Gap, along Highway 92 between Half Moon Bay and San Carlos. The low point is 900 feet, with elevations of 1500 feet north and south of the gap. As the sea breeze strengthens on summer afternoons, the gap permits maritime air to pass across the mountains and its cooling effect is commonly seen from San Mateo to Redwood City.

Rainfall amounts on the east side of the peninsula are somewhat lower than on the west side, with San Francisco and Redwood City reporting an average of 19.5 inches per year. On the west side, Half Moon Bay reports 25 inches per year. Areas in the Santa Cruz Mountains are significantly higher, especially west of the ridge line, due to orographic-lifting induced condensation, close proximity to a moisture source, and fog drip.

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. In San Francisco, to the north, pollutant emissions are high, but winds are generally fast enough to carry the pollutants away before they can accumulate.

3.2.2.2 Criteria Air Pollutants of Concern

The federal and state governments have established NAAQS and CAAQS, respectively, for six criteria pollutants: ozone, CO, lead (Pb), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and PM, which consists of PM of 10 microns in diameter or less (PM10) and PM of 2.5 microns in diameter or less (PM2.5).

Ozone and NO_2 are considered regional pollutants because they (or their precursors) affect air quality on a regional scale; NO_2 reacts photochemically with reactive organic gases (ROGs) to form ozone, and this reaction occurs at some distance downwind of the source of pollutants. Pollutants such as CO, SO_2, and Pb are considered to be local pollutants that tend to accumulate in the air locally. PM is considered to be a local as well as a regional pollutant.

The primary pollutants of concern in the study area are ozone (including NO_X), CO, and PM. Principal characteristics surrounding these pollutants are discussed below. TACs are also discussed, although no air quality standards exist for these pollutants.

Ozone

Ozone is a respiratory irritant that can cause severe ear, nose, and throat irritation and increases susceptibility to respiratory infections. It is also an oxidant that causes extensive damage to plants through leaf discoloration and cell damage. It can cause substantial damage to other materials as well, such as synthetic rubber and textiles.

Ozone is not emitted directly into the air but is formed by a photochemical reaction in the atmosphere. Ozone precursors—ROGs and NO_X—react in the atmosphere in the presence of sunlight to form ozone. Because photochemical reaction rates depend on the intensity of ultraviolet light and air temperature, ozone is primarily a summer air pollution problem. The ozone precursors, ROG and NO_X, are mainly emitted by mobile sources and by stationary combustion equipment.

Hydrocarbons are organic gases that are made up of hydrogen and carbon atoms. There are several subsets of organic gases, including ROGs and volatile organic compounds (VOCs). ROGs are defined by state rules and regulations; VOCs are defined by federal rules and regulations. For the purposes of this assessment, hydrocarbons are classified and referred to as ROGs. Both ROGs and VOCs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels, or as a product of chemical processes. The major sources of hydrocarbons are combustion engine exhaust, oil refineries, and oil-fueled power plants; other common sources are petroleum fuels, solvents, dry-cleaning solutions, and paint (through evaporation).

The health effects of hydrocarbons result from the formation of ozone. High levels of hydrocarbons in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen though displacement. Carcinogenic forms of hydrocarbons are considered TACs. There are no separate health standards for ROGs, although some are also toxic; an example is benzene, which is both a ROG and a carcinogen.

Nitrogen Oxides

Nitrogen oxides are a family of highly reactive gases that are a primary precursor to the formation of ground-level ozone, and react in the atmosphere to form acid rain. Nitrogen dioxide, often used interchangeably with NO_X, is a brownish, highly reactive gas that is present in all urban environments. The major human sources of NO_2 are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO_2 (U.S. Environmental Protection Agency 2012). The combined emissions of NO and NO_2 are referred to as NO_X and reported as equivalent NO_2. Because NO_2 is formed and depleted by reactions associated with ozone, the NO_2 concentration in a particular geographical area may not be representative of local NO_X emission sources.

Inhalation is the most common route of exposure to NO_2. Because NO_2 has relatively low solubility in water, the principal site of toxicity is in the lower respiratory tract. The severity of the adverse health effects primarily depends on the concentration inhaled rather than the duration of exposure. An individual may experience a variety of acute symptoms, such as coughing, difficulty breathing, vomiting, headache, and eye irritation during or shortly after exposure. After a period of approximately 4–12 hours, an exposed individual may experience chemical pneumonitis or pulmonary edema with breathing abnormalities, cough, cyanosis, chest pain, and rapid heartbeat. Severe symptomatic NO_2 intoxication after acute exposure has been linked to prolonged respiratory impairment, with such symptoms as chronic bronchitis and decreased lung function (U.S. Environmental Protection Agency 2012).

Carbon Monoxide

CO has little effect on plants and materials, but it can have significant effects on human health. CO is a public health concern because it combines readily with hemoglobin and thus reduces the amount of oxygen transported in the bloodstream. Effects range from slight headaches to nausea to death.

Motor vehicles are the primary source of CO emissions in most areas. In the Project area, high CO levels are of greatest concern during the winter, when periods of light winds combine with the formation of ground-level temperature inversions from evening through early morning. These conditions trap pollutants near the ground, reducing the dispersion of vehicle emissions. Moreover, motor vehicles exhibit increased CO emission rates at low air temperatures. Dramatic reductions in CO levels across California, including a 50% decrease in statewide peak CO levels between 1980 and 2004, have been witnessed during the past several decades. These reductions are primarily a result of ARB requirements for cleaner vehicles, equipment, and fuels (California Air Resources Board 2004:1).

Particulate Matter

Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter also forms when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. PM10 is about 1/7th the thickness of a human hair, and PM2.5 is roughly 1/28th the diameter of a human hair. Major sources of PM10 include motor vehicles; wood burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. PM2.5 results from fuel combustion (from motor vehicles, power generation, and industrial facilities), residential fireplaces, and wood stoves. In addition, PM10 and PM2.5 can be formed in the atmosphere from gases such as SO_2, NO_X, and VOCs.

PM10 and PM2.5 pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. PM10 and PM2.5 can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances, such as lead, sulfates, and nitrates, can cause lung damage directly. These substances can be absorbed into the blood stream and cause damage elsewhere in the body; they can also transport absorbed gases such as chlorides or ammonium into the lungs and cause injury. Whereas particles 2.5 to 10 microns in diameter (PM10) tend to collect in the upper portion of the respiratory system, particles 2.5 microns or less (PM2.5) are so tiny that they can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, and contribute to haze and reduce regional visibility.

Toxic Air Contaminants

TACs are pollutants that may result in an increase in mortality or serious illness, or that may pose a present or potential hazard to human health. Health effects of TACs include cancer, birth defects, neurological damage, damage to the body's natural defense system, and diseases that lead to death. In 1998, following a 10-year scientific assessment process, ARB identified PM from diesel-fueled engines (DPM)—as a TAC. Compared to other air toxics ARB has identified, DPM emissions are estimated to be responsible for about 70% of the total ambient air toxics risk (California Air Resources Board 2000:1).

3.2.2.3 Energy

California has a diverse portfolio of energy resources. Excluding offshore areas, the state ranked third in the nation in crude oil production in 2013, producing more than 16,950 barrels (equivalent to 1,143.8 trillion British thermal units [BTU]). The state also ranked fourth in the nation in conventional hydroelectric generation and first in the nation for net electricity generation from renewable resources. Other energy sources in the state include natural gas, nuclear, and biofuels (U.S. Energy Information Administration 2014).

Energy efficiency efforts have dramatically reduced statewide per capita energy consumption relative to historical averages. According to the U.S. Energy Information Administration (2014), California consumed approximately 7,612 trillion BTUs of energy in 2012. Per capita energy consumption (i.e., total energy consumption divided by the population) in California is among the lowest in the country, with 201 million BTU in 2012, which ranked 49th among all states in the country. Natural gas accounted for the majority of energy consumption (32%), followed by motor gasoline (22%), distillate and jet fuel (14%), interstate electricity (11%), nuclear and hydroelectric power (6%), and a variety of other sources (U.S. Energy Information Administration 2014). The transportation sector consumed the highest quantity of energy (38.5%), followed by the industrial and commercial sectors.

Per capita energy consumption, in general, is declining due to improvements in energy efficiency and design. However, despite this reduction in per capita energy use, the state's total overall energy consumption (i.e., non-per capita energy consumption) is expected to increase over the next several decades due to growth in population, jobs, and demand for vehicle travel. Electricity usage is anticipated to grow about 26% over the next two decades, and diesel fuel consumption may increase by 35% to 42% over the same time period. Gasoline usage, however, is expected to decrease by 8.5% to 11.3%. This decrease would largely be a result of high fuel prices, efficiency gains, and competing fuel technologies (U.S. Energy Information Administration 2013).

San Mateo County is served by one utility: Pacific Gas & Electric (PG&E). Regionally, PG&E has a diverse power production portfolio, which is comprised of a variety of renewable (such as wind, solar, and hydroelectric) and nonrenewable (such as natural gas) sources. Energy production typically varies by season and by year depending on hydrologic conditions. Regional electricity loads also tend to be higher in the summer because the higher summer temperatures drive increased demand for air-conditioning. In contrast, natural gas loads are higher in the winter because the colder temperatures drive increased demand for natural gas heating.

3.2.2.4 Air Quality Conditions

Existing air quality conditions in the study area can be characterized by monitoring data collected in the region. The air quality monitoring station closest to the campuses is the Redwood City station at 897 Barron Avenue, which is located approximately 7 miles to the southeast of the Cañada College campus, 13.5 miles southeast of the College of San Mateo (CSM) campus, and 23.5 miles southeast of the Skyline College campus. Recent air quality monitoring results from the Redwood City station are summarized in **Table 3.2-2**. The data represent air quality monitoring for the last 3 years for which a complete dataset is available (2012–2014). As indicated in **Table 3.2-2**, the Redwood City monitoring station has not experienced any violations of state or federal air quality standards during this time period.

Table 3.2-2. Ambient Air Quality Monitoring Data from Redwood City Monitoring Station[a]

Pollutant Standards	2012	2013	2014
Ozone (O_3)			
Maximum 1-hour concentration (ppm)	0.063	0.083	0.086
Maximum 8-hour concentration (ppm)	0.054	0.075	0.065
Number of days standard exceeded[b]			
CAAQS 1-hour (>0.09 ppm)	0	0	0
CAAQS 8-hour (>0.070 ppm)	0	1	0
NAAQS 8-hour (>0.075 ppm)	0	0	0
Carbon Monoxide (CO)			
Maximum 8-hour concentration (ppm)	1.81	1.6	1.6
Maximum 1-hour concentration (ppm)	4.0	3.6	3.2
Number of days standard exceeded[b]			
NAAQS 8-hour (≥9 ppm)	0	0	0
CAAQS 8-hour (≥9.0 ppm)	0	0	0
NAAQS 1-hour (≥35 ppm)	0	0	0
CAAQS 1-hour (≥20 ppm)	0	0	0
Nitrogen Dioxide (NO_2)			
State maximum 1-hour concentration (ppb)	60	53	55
State second-highest 1-hour concentration (ppb)	50	51	54
Annual average concentration (ppb)	11	12	11
Number of days standard exceeded			
CAAQS 1-hour (180 ppb)	0	0	0
Particulate Matter (PM10)[c]			
National[d] maximum 24-hour concentration (µg/m³)	56.5	55.8	56.4
National[d] second-highest 24-hour concentration (µg/m³)	46.1	53.7	52.0
State[e] maximum 24-hour concentration (µg/m³)	59.6	58.1	54.7
State[e] second-highest 24-hour concentration (µg/m³)	48.8	57.1	49.6
National annual average concentration (µg/m³)	18.8	21.6	19.5
State annual average concentration (µg/m³)[f]	18.8	22.2	20.0
Number of days standard exceeded[b]			
NAAQS 24-hour (>150 µg/m³)[g]	0	0	0
CAAQS 24-hour (>50 µg/m³)[g]	1	5	1
Particulate Matter (PM2.5)			
National[d] maximum 24-hour concentration (µg/m³)	33.3	39.0	35.0
National[d] second-highest 24-hour concentration (µg/m³)	26.8	38.5	32.4
State[e] maximum 24-hour concentration (µg/m³)	34.3	39.0	35.0
State[e] second-highest 24-hour concentration (µg/m³)	26.8	38.5	32.4
National annual average concentration (µg/m³)	8.5	10.7	7.2
State annual average concentration (µg/m³)[f]	*	*	7.2
Number of days standard exceeded[b]			
NAAQS 24-hour (>35 µg/m³)	0	3	0

Pollutant Standards	2012	2013	2014

Source: California Air Resources Board 2015; U.S. Environmental Protection Agency 2015.
Notes:
ppm = parts per million
NAAQS = National Ambient Air Quality Standards
CAAQS = California Ambient Air Quality Standards
µg/m^3 = micrograms per cubic meter
mg/m^3 = milligrams per cubic meter
- = data not available

[a] Data for Particulate Matter (PM10) was unavailable from the Redwood City Monitoring Station so data is taken from the San Jose – Jackson Street Monitoring Station.

[b] An exceedance is not necessarily a violation.

[c] National statistics are based on standard conditions data. In addition, national statistics are based on samplers using federal reference or equivalent methods.

[d] State statistics are based on local conditions data, except in the South Coast Air Basin, for which statistics are based on standard conditions data. In addition, state statistics are based on California approved samplers.

[e] Measurements usually are collected every 6 days.

[f] State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.

Mathematical estimate of how many days' concentrations would have been measured as higher than the level of the standard had each day been monitored. Values have been rounded.

Local monitoring data (**Table 3.2-2**) are used to designate areas as nonattainment, maintenance, attainment, or unclassified for the NAAQS and CAAQS. The four designations are defined as follows.

- Nonattainment—assigned to areas where monitored pollutant concentrations consistently violate the standard in question.
- Maintenance—assigned to areas where monitored pollutant concentrations exceeded the standard in question in the past but are no longer in violation of that standard.
- Attainment—assigned to areas where pollutant concentrations meet the standard in question over a designated period of time.
- Unclassified—assigned to areas were data are insufficient to determine whether a pollutant is violating the standard in question.

Table 3.2-3 summarizes the attainment status of the San Mateo County with regard to the NAAQS and CAAQS.

Table 3.2-3. Federal and State Attainment Status for San Mateo County

Criteria Pollutant	Federal Designation	State Designation
O_3 (8-hour)	Marginal Nonattainment	Nonattainment
CO	Maintenance	Attainment
PM10	Attainment	Nonattainment
PM2.5	Nonattainment	Nonattainment
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	(No Federal Standard)	Attainment
Hydrogen Sulfide	(No Federal Standard)	Unclassified
Visibility	(No Federal Standard)	Unclassified

Source: California Air Resources Board 2012a; U.S. Environmental Protection Agency 2013.
CO = carbon monoxide
PM10 = particulate matter less than or equal to 10 microns
PM2.5 = particulate matter less than or equal to 2.5 microns
NO_2 = nitrogen dioxide
SO_2 = sulfur dioxide

3.2.2.5 Sensitive Receptors Near Campuses

The NAAQS and CAAQS apply at publicly accessible areas, regardless of whether those areas are populated. The BAAQMD generally defines a sensitive receptor as a facility or land use that houses or attracts members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of sensitive receptors include residences, hospitals, and schools. Sensitive receptors located within 1,000 feet of each campus are provided in **Table 3.2-4** through **Table 3.2-6**.

Table 3.2-4. Sensitive Receptors within 1,000 feet of the Cañada College Campus

Sensitive Receptor	Distance
Residences off campus	100 feet northwest of Lot 10 Expansion
Residences off campus	300 feet southwest of Lot 10 Expansion
Residences off campus	650 feet south of Lot 6 Expansion
Cañada Vista Residences on campus	600 feet east of Bldg. 1, Kinesiology/Wellness

Table 3.2-5. Sensitive Receptors within 1,000 feet of the College of San Mateo Campus

Sensitive Receptor	Distance
Serendipity Preschool	800 feet south of Gymnasium
Stepping Stones Autistic Learning Center	880 feet south of Gymnasium
Residences off campus	380 feet northeast of Bldg. 34 Renovation
Residences off campus	700 feet southwest Bldg. 17 Renovation
Residences off campus	550 feet west of Bldg. 3 Renovation
College Vista Residences on campus	900 feet south of Bldg. 3 Renovation

Table 3.2-6. Sensitive Receptors within 1,000 feet of the Skyline College Campus

Sensitive Receptor	Distance
Residences off campus	60 feet west of Lot L Expansion
Residences off campus	70 feet north Lot L Expansion
Residences off campus	125 feet east Lot L Expansion
Residences off campus	125 feet northwest of Residential Complex
Residences off campus	25 feet east Residential Complex
San Francisco County Jail #5—San Bruno Complex	500 feet south of Residential Complex

3.2.3 Impacts Analysis

This section describes the environmental impacts of the Project on air quality and energy. It describes the methods used to evaluate the impacts and the thresholds used to determine whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts are provided, where appropriate.

3.2.3.1 Methodology

Air Quality

Impacts of the Project on air quality and criteria pollutants emissions from construction and operations were assessed and quantified using standard and accepted software tools, techniques, and emission factors. This section describes the primary assumptions and key methods used to quantify emissions and estimate potential impacts. Assumptions used in the air quality analysis can be found in **Appendix B,** *Air Quality and Greenhouse Gas Data and Calculations.*

Construction of the Project would generate emissions of ROG, NO_X, SO_X, CO, PM10, and PM2.5 that would result in short-term impacts on ambient air quality in the study area. Emissions would originate from mobile and stationary construction equipment exhaust, employee vehicle exhaust, dust from land clearing, and application of architectural coatings. It was expected that construction would occur between Fall 2016 and Spring 2027 between the three campuses, with Cañada College construction taking place between 2016 and 2021, CSM construction taking place between 2016 and 2024, and Skyline College construction taking place between 2017 and 2027, with various phases of construction taking place concurrently within each campus. Total square footage of buildings to be demolished and built at each campus is shown in **Table 3.2-7**.

Table 3.2-7. Gross Square Footage (gsf) of Buildings Demolished and Built per Campus

Campus	Existing	Proposed
Cañada College	45,260	140,000
College of San Mateo	109,045	133,250
Skyline College	116,429	150,000

Construction-related criteria pollutant emissions from heavy-duty equipment, onroad vehicles, and land disturbance were estimated using the California Emissions Estimator Model (CalEEMod), version 2013.2.2, using construction activity and scheduling provided by the Project applicant.

Equipment inventory data, including equipment type, horsepower, and load factors, were generated by model default values and professional judgement, as this data was not available, and were reviewed by the Project applicant. The analysis assumed 8-hour workdays and a 5 day work week (Monday–Friday) for all construction work.

Emissions were estimated for each phase of activity based on activity data (e.g., construction schedule and phasing) provided by the Project applicant. Emissions were combined for construction activities that overlapped and compared to BAAQMD construction emissions thresholds. Maximum daily criteria pollutant emissions for each campus were evaluated separately in order to determine whether construction activities at a specific campus would result in exceedances of BAAQMD thresholds. Cumulative construction-related emissions were combined as total project maximum daily emissions by month for the duration of the construction activities for all three campuses. Total combined maximum daily criteria pollutant emissions were then compared to BAAQMD thresholds to determine Project significance.

Since total student enrollment and staff employment is projected to remain constant before, during, and after construction activities, no new vehicle trips are projected to take place at any of the three campuses. Two exceptions are for the new Building 1, Kinesiology/Wellness, at Cañada College and the proposed residential complex at Skyline College. Building 1, Kinesiology/Wellness, would replace the existing Gymnasium and would offer membership to the general public in addition to students, staff, and faculty; the current Gymnasium is for enrolled students, staff, and faculty only. The residential complex would consist of multi-family apartments for faculty and staff that work at any of the three campuses and single-family homes for the general public. Since the vehicle trips involving faculty and staff that work at the CSM and Cañada College campuses originate from the residential complex at Skyline College, mobile emissions related to the residential complex are split 50/50 between Skyline College and Cañada College, and 50/50 between Skyline College and CSM.

Operations-related criteria pollutant emissions from an increase in vehicle trips to the Cañada College and Skyline College campuses, as well as an increase in total building square footages on all three campuses, were estimated using the California Emissions Estimator Model (CalEEMod), version 2013.2.2, using operational activity and vehicle trip rates provided by the District and Hexagon Transportation Consultants, respectively.

Exposure to construction-related DPM was assessed by predicting the health risks in terms of excess cancer, non-cancer hazard impacts, and elevated PM2.5 concentrations.[1] EPA's AERMOD dispersion model was used to predict annual DPM and PM2.5 concentrations at sensitive land uses based on the average daily PM10 exhaust and PM2.5 fugitive dust mass emissions, with exhaust emissions of PM10 used as surrogate for DPM based on OEHHA guidance (Office of Environmental Health Hazard Assessment 2015). Project-level cancer risk, non-cancer (hazard index [HI]) and annual PM2.5 concentrations were estimated based on annual concentrations from AERMOD, anticipated construction durations, and accepted OEHHA (Office of Environmental Health Hazard Assessment 2015) and BAAQMD (Bay Area Air Quality Management District 2011b) default values. The risk calculations incorporate OEHHA's recent guidance update, which includes age-specific factors to take into account the increased sensitivity to carcinogens during early-in-life exposure.

[1] The Project itself is not expected to represent a significant operational source of DPM, and the analysis of health risks associated with the project focuses on construction activities.

Consistent with BAAQMD guidance, cumulative health risks were also analyzed by adding Project-level health risk contributions to ambient conditions. Background stationary, highway, and railway sources within 1,000 feet of the construction sites on each campus were identified using Google Earth map files provided by the BAAQMD (Bay Area Air Quality Management District 2014). The Google Earth map files include estimated risk and hazard impacts at nearby receptors from these sources. Risk and hazard impacts from generators were adjusted using the BAAQMD's Diesel Internal Combustion (IC) Engine Multiplier Tool.

Because air quality impacts are inherently cumulative and because the significance criteria (identified in Section 3.2.3.2, *Significance Criteria*) includes cumulative net increases of criteria pollutants and TACs, cumulative impacts are considered in the discussion of project impacts in Section 3.2.3.3, as well as the discussion of cumulative impacts in Section 3.2.3.4, *Cumulative Impacts*.

Energy

The energy analysis for the Project evaluates the following sources of energy consumption associated with the Project.

- Short-term construction—gasoline and diesel consumed by vehicles and off-road construction equipment.
- Operational onroad vehicles—gasoline and diesel consumed by personal automobiles and service trucks.
- Operational power, heating, and cooling—electricity and natural gas consumed by occupants.

Construction-related energy use (i.e., fuel consumption) was calculated by converting GHG emissions predicted by CalEEMod using the rate of CO_2 emissions emitted per gallon of combusted diesel (22.2 pounds/gallon) (Climate Registry 2014). The estimated fuel consumption was converted to BTU assuming an energy intensity of 129,488 per gallon of diesel (Argonne 2013).

Energy consumed by operational onroad vehicles was quantified using the estimated vehicle miles traveled (VMT) under full project buildout (2027) developed by the air quality analysis (**Appendix B**). The estimated VMT was converted to BTU assuming using a Pavley-adjusted weighted energy intensity for of 4,683 BTU per vehicle mile (Oak Ridge National Laboratory 2013).

Operational electricity and natural gas consumption under full project buildout (2027) was drawn from the CalEEMod modeling performed to support the GHG analysis (Section 3.6, *Greenhouse Gas Emissions*). CalEEMod outputs for natural gas consumption are provided in BTU; outputs for electricity consumption, which are provided in kilowatt-hours (kWh), were converted to BTU assuming an energy intensity of 3,416 BTU per kWh (Argonne 2013).

3.2.3.2 Significance Criteria

Air Quality

The State CEQA Guidelines Appendix G (14 CCR 15000 et seq.) has identified significance criteria to be considered for determining whether a project could have significant impacts on existing air quality and energy resources.

An impact would be considered significant if construction or operation of the Project would have any of the following consequences.

- 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.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.

According to the State CEQA Guidelines, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make significance determinations for potential impacts on environmental resources. As discussed above, BAAQMD is responsible for ensuring that the NAAQS and CAAQS are not violated within the SFBAAB. Analysis requirements for construction- and operational-related pollutant emissions are contained in the BAAQMD's (2011a) CEQA Guidelines. BAAQMD's CEQA Guidelines also contain thresholds of significance for ozone, CO, PM2.5, PM10, TACs, and odors; these thresholds are presented in **Table 3.2-8**.

Table 3.2-8. BAAQMD Project-Level Criteria Pollutant Emissions Thresholds

Pollutant	Construction	Operations
ROG	54 lbs/day	54 lbs/day or 10 tons/year
NO_X	54 lbs/day	54 lbs/day or 10 tons/year
CO	–	Violation of CAAQS
PM10 (total)	–	-
PM10 (exhaust)	82 lbs/day	82 lbs/day or 15 tons/year
PM2.5 (exhaust)	54 lbs/day	54 lbs/day or 10 tons/year
PM10 /PM2.5 (fugitive dust)	Best management practices (BMPs)	-
TACs (Project-level)	Increased cancer risk of 10 in 1 million; increased non-cancer risk of greater than 1.0 (hazard index [HI]); PM2.5 increase of greater than 0.3 micrograms per cubic meter	Same as construction
TACs (cumulative)	Increased cancer risk of 100 in 1 million; increased non-cancer risk of greater than 10.0; PM2.5 increase of greater than 0.8 microgram per cubic meter at receptors within 1,000 feet	Same as construction
Odors	–	Five complaints per year averaged over three years

Source: Bay Area Air Quality Management District 2011a.

ROG	=	reactive organic gases
NO_x	=	nitrogen oxides
CO	=	carbon monoxide
PM10	=	particulate matter less than or equal to 10 microns
PM2.5	=	particulate matter less than or equal to 2.5 microns
TACs	=	toxic air contaminants

In March 2012, an Alameda County Superior Court ruled that BAAQMD needed to comply with CEQA prior to BAAQMD adopting its 2010 CEQA Guidelines. The Superior Court decision was reversed on appeal by the Court of Appeal, holding that, in general, the adoption of local CEQA guidelines by the BAAQMD is not subject to CEQA review. The decision by the Court of Appeal reinforces State CEQA Guidelines Section 15064.7, which establishes the required procedure for enacting generally applicable thresholds of significance, and does not require a CEQA review as part of the process. The BAAQMD Guidelines are before the California Supreme Court over the question of whether CEQA applies to impacts of the environment on a project. This challenge relates to the applicability of TAC standards based on the effect of existing pollutant sources on new development.

While BAAQMD is no longer recommending its significance thresholds for use by local agencies at this time, the BAAQMD's proposed thresholds are supported on substantial evidence and are well-grounded on air quality regulations, scientific evidence, and scientific reasoning concerning air quality and GHG emissions. Use of these thresholds by the District in its independent role as a lead agency is appropriate to determine significance in the environmental review of this Project and allows a rigorous standardized approach of determining whether the Project would cause a significant air quality impact. BAAQMD's Justification Report, found in Appendix D of the BAAQMD's May 2011 CEQA Guidelines, explains the agency's reasoning and provides substantial evidence for developing and adopting their thresholds (Bay Area Air Quality Management District 2011b).

Criteria Air Pollutants

The significance thresholds, as shown in **Table 3.2-8**, for criteria pollutants (ROG, NO_X, PM10, and PM2.5) are based on the stationary source emission limits of the federal CAA and the BAAQMD Regulation 2, Rule 2. The federal New Source Review (NSR) program, created by the federal CAA, set the emissions limits to ensure that stationary sources of air pollution are constructed in a manner that is consistent with attainment of NAAQS. Similarly, to ensure that new stationary sources do not cause or contribute to a violation of an NAAQS, BAAQMD Regulation 2 Rule 2 requires any new source that emits criteria air pollutants above specified emissions limits to offset those emissions. Although the emission limits are adopted in the regulation to control stationary source emissions, when addressing public health impacts of regional criteria pollutants, the amount of emissions is the key determining factor, regardless of source. Thus, the emission limits are appropriate for the evaluation of land use development and construction activities as well as stationary sources. Those projects that result in emissions below the thresholds would not be considered to be projects that would contribute to an existing or projected air quality violation or result in a considerable net increase in criteria pollutant emissions. The federal NSR emission limits and BAAQMD's offset limits are identified in the regulation on an annual basis (in tons per year). For construction activities, the limits are converted to average daily emissions (in pounds per day), as shown in **Table 3.2-8**, because of the short-term intermittent nature of construction activities and, if emissions would not exceed the average daily emission limits, the Project would also not exceed the annual levels.

Toxic Air Contaminants

Similar to the criteria pollutant thresholds, the health risk impact thresholds are developed based on the cancer and non-cancer risk limits for new and modified sources adopted in the BAAQMD Regulation 2, Rule 5, and the EPA Significant Impact Level (SIL) for PM2.5 emissions. The EPA SIL is a measure of whether a source may cause or contribute to a violation of NAAQS. Health risks due to toxic emissions from construction, though temporary, can still result in substantial public health impacts due to increases cancer and non-cancer risks. Applying quantitative thresholds allows a

rigorous standardized method of determining when a construction project will cause a significant increase in increases cancer and non-cancer risks. The cumulative health risk thresholds are based on EPA guidance for conducting air toxics analyses and making risk management decisions at the facility and community-scale level and are also consistent with the ambient cancer risk in the most pristine portions of the Bay Area based on the BAAQMD's recent regional modeling analysis and the non-cancer Air Toxics Hot Spots mandatory risk reduction levels.

Odors

The threshold for odor is consistency with the BAAQMD Regulation 7 for Odorous Substances and reflects the most stringent standards derived from the air district's rule.

Energy

Based on State CEQA Guidelines Appendix F, environmental impacts may include those listed below.

- The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project, including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- The effects of the project on peak- and base-period demands for electricity and other forms of energy.
- The degree to which the project complies with existing energy standards.
- The effects of the project on energy resources.
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

The State CEQA Guidelines recommend that the discussion of applicable energy impacts focus on whether the project would result in the wasteful, inefficient, or unnecessary consumption of energy, as this may constitute an unavoidable adverse effect on energy resources. Efficiency projects that incorporate conservation measures to avoid wasteful energy usage facilitate long-term energy planning and avoid the need for unplanned or additional energy capacity. Accordingly, based on the criteria outlined in the State CEQA Guidelines Appendix F, the Project would cause significant impacts related to energy if it would result lead to a wasteful, inefficient, and unnecessary usage of direct or indirect energy. As discussed in Section 3.2.1, *Regulatory Setting*, energy legislation, policies, and standards adopted by California and local governments were enacted and promulgated for the purpose of reducing energy consumption and improving efficiency (i.e., reducing wasteful and inefficient use of energy). Therefore, for the purposes of this analysis, *wasteful* and *inefficient* are defined as circumstances in which the Project would conflict with applicable state or local energy legislation, policies, and standards. Accordingly, if the Project conflicts with legislation, policies, or standards designed to avoid wasteful and inefficient energy usage, it would result in a significant impact related to energy resources and conservation.

3.2.3.3 Impacts and Mitigation Measures

Cañada College

Impact CC-AQE-1: Conflict with or obstruct implementation of an applicable air quality plan (less than significant)

San Mateo County is currently designated a nonattainment area for federal ozone and PM2.5, standards, a maintenance area for the federal CO standard, and nonattainment for state ozone, PM10, and PM2.5 standards (**Table 3.2-3**). The most recent federal attainment plans are the 2001 Ozone Attainment Plan and the 1994 CO Redesignation Request and Maintenance Plan. The most recent state air quality plan is the 2010 Clean Air Plan, which provides an integrated strategy to control ozone, PM, TACs, and GHG emissions. BAAQMD plans estimate future emissions in the SFBAAB and determine strategies necessary for emissions reductions through regulatory controls. Emissions projections are based on population, vehicle, and land use trends typically developed by BAAQMD, Metropolitan Transportation Commission (MTC), and Association of Bay Area Governments (ABAG).

A project is deemed inconsistent with air quality plans if it would result in population and/or employment growth that exceeds estimates used to develop applicable air quality plans. The BAAQMD bases its plans on local general plan growth projections. Therefore, projects that propose development that is consistent with the level of growth anticipated by the relevant local general plans would be consistent with the current BAAQMD air quality plans. Likewise, projects that propose development that is less dense than anticipated within a general plan (or other governing land use document) would be consistent with the air quality plans because emissions would be less than estimated for the region. If a project proposes development that is greater than growth projections, the project would be in conflict with the BAAQMD air quality plans, and might have a potentially significant impact on air quality because emissions would exceed those estimated for the region. This situation would warrant further analysis to determine if a proposed project and surrounding projects would exceed the growth projections used in the BAAQMD air quality plans for a specific subregional area.

The most relevant land use plans for Cañada College are the Redwood City and Woodside General Plans and related documents. Similarly, the Project's inclusion of energy- and water-efficient building development and renovations would be consistent with City Policy (Green Building Program). Accordingly, the Project is considered consistent with growth projection in the most relevant land use plan.

The Project is consistent with the BAAQMD's 2010 Clean Air Plan (CAP) strategies and control measures, including TCM-D-2 (Pedestrian Access and Facilities Improvements) and ECM 2 (Renewable Energy). TCM-D-2 will improve pedestrian facilities and encourage walking by funding projects that improve pedestrian access to transit, employment and major activity centers. Improvements may include sidewalks/paths, benches, reduced street width, reduced intersection turning radii, crosswalks with activated signals, curb extensions/bulbs, buffers between sidewalks and traffic lanes, and street trees. ECM 2 promotes incorporation of renewable energy sources into new developments and redevelopment projects.

The Project includes numerous energy conservation measures. For example, all new building construction at Cañada College would target LEED[2] Gold certification, and all new modernization and renovation projects would exceed the California Building Code Title 24 2013 Energy Efficiency Standards by at least 15%. Project measures would act to reduce project-related area and mobile source emissions, relative to traditional community college uses. While emissions would be generated during construction and operation (discussed below), these emissions are neither expected to exceed BAAQMD significance thresholds nor impede attainment or maintenance of the NAAQS or CAAQS.

Because the Project would not conflict with any applicable land use plan or policy, is consistent with recent growth projections for the region, contributes to the Cities' and Town's long-term visions for sustainable growth, is consistent with measures in BAAQMD's 2010 CAP, and long-term project emissions would not exceed the significance threshold, it would not conflict with or obstruct implementation of the current BAAQMD air quality plans. Therefore, the impact would be less than significant. No mitigation is required.

Impact CC-AQE-2: Violate a BAAQMD air quality standard or substantially contribute to an existing or projected air quality violation during Project construction (less than significant with mitigation)

Project construction has the potential to create air quality impacts through the use of heavy-duty construction equipment, construction worker vehicle trips, truck hauling trips, and off-gassing from paving and coatings. In addition, fugitive dust emissions would result from demolition of existing structures, excavation, and grading. Mass criteria pollutant emissions generated by these sources were quantified using emission factors and methodologies within CalEEMod (version 2013.2.2) and information provided by the Project applicant.

Estimated construction emissions are summarized in **Table 3.2-9**. Maximum daily emissions for each year of construction are due to overlapping activities, based on the Project schedule and phasing information provided by the Project applicant. Detailed information on emissions modeling and quantification methods can be found in **Appendix B.**

As shown in **Table 3.2-9**, construction of the project would generate NO_X exhaust in excess of the BAAQMD's numeric thresholds during each year of construction 2016–2019 without implementation of mitigation. **Mitigation Measures CC-AQE-1** through **CC-AQE-4** are required to reduce NO_X emissions to a less-than-significant level, with **Mitigation Measures CC-AQE-1** through **CC-AQE-3** reducing all emissions to below the BAAQMD's threshold except for the year 2017; to further reduce this impact to a less-than significant-level, **Mitigation Measure CC-AQE-4** is required.[3] Note the BAAQMD CEQA Guidelines consider dust impacts to be less than significant through the application of BAAQMD-recommended best management practices (BMPs). Therefore, with implementation of **Mitigation Measure CC-AQE-5** to reduce construction-related fugitive dust emissions, this impact would be less than significant.

[2] LEED, or Leadership in Energy & Environmental Design, is a green building certification program that recognizes best-in-class building strategies and practices.

[3] In the event **Mitigation Measures CC-AQE-1** through **CC-AQE-3** are not sufficient to reduce emissions below the BAAQMD's construction thresholds, **Mitigation Measure CC-AQE-4** would also ensure construction emissions are offset to below BAAQMD's thresholds to a less-than-significant level.

Table 3.2-9. Cañada College Daily Construction Emissions (pounds/day)

Unmitigated										
Year	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
2016	10.2	110.3	81.2	0.1	19.0	5.6	24.6	10.1	5.2	15.3
2017	15.2	153.9	115.0	0.1	20.0	8.1	28.1	10.4	7.5	17.9
2018	10.7	88.9	72.0	0.1	1.6	5.2	6.8	0.4	4.9	5.3
2019	11.7	99.1	82.8	0.1	1.7	5.8	7.5	0.5	5.5	5.9
2020	5.2	50.8	33.7	0.0	0.3	3.4	3.7	0.1	3.1	3.2
2021	4.2	36.4	40.2	0.1	0.6	1.9	2.5	0.1	1.8	1.9
Daily Maximum	**15.2**	**153.9**	**115.0**	**0.1**	**20.0**	**8.1**	**28.1**	**10.4**	**7.5**	**17.9**
BAAQMD Threshold	*54*	*54*	--	--	*BMPs*	*82*	--	*BMPs*	*54*	--
BAAQMD Threshold Exceeded?	*No*	*Yes*				*No*			*No*	
Mitigated										
Year	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
2016	5.8	59.2	81.2	0.1	19	0.4	19.4	10.1	0.4	10.5
2017	8.7	82.7[a]	115	0.1	20	0.6	20.6	10.4	0.5	10.9
2018	6.1	47.7	72	0.1	1.6	0.4	2.0	0.4	0.3	0.7
2019	6.7	53.2	82.8	0.1	1.7	0.4	2.1	0.5	0.4	0.9
2020	3.0	27.3	33.7	0	0.3	0.2	0.5	0.1	0.2	0.3
2021	2.4	19.5	40.2	0.1	0.6	0.1	0.7	0.1	0.1	0.2
Daily Maximum	**8.7**	**82.7[a]**	**115.0**	**0.1**	**20.0**	**0.6**	**20.6**	**10.4**	**0.5**	**10.9**
BAAQMD Threshold	*54*	*54*	--	--	*BMPs*	*82*	--	*BMPs*	*54*	--
BAAQMD Threshold Exceeded?	*No*	*Yes[a]*				*No*			*No*	

ROG = reactive organic gases
NO_x = nitrogen oxides
CO = carbon monoxide
SO_x = sulfur oxides
PM10 = particulate matter
PM2.5 = fine particulate matter

[a] Mitigated exhaust emissions include application of **Mitigation Measures CC-AQE-1** through **CC-AQE-3**and **CC-AQE-5**. Implementation of **Mitigation Measures CC-AQE-4** would be required to further reduce construction emissions to a less-than-significant level.

Mitigation Measure CC-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at Cañada College

The District will ensure the construction contractor implements the following BAAQMD-recommended basic control measures to reduce NO_X emissions from construction equipment:

- Idling times will be minimized by shutting off equipment when it is not in use or by reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage will be provided for construction workers at all access points.
- All construction equipment will be maintained and properly tuned in accordance with manufacturer's specifications. All equipment will be checked by a certified mechanic and determined to be running in proper condition prior to operation.

Mitigation Measure CC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Cañada College

The District will ensure the construction contractor implements the following BAAQMD-recommended additional control measures to reduce NO_X emissions from construction equipment.

- Minimize the idling time of diesel powered construction equipment to 2 minutes.
- The project will develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction Project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20% NO_X reduction and 45% PM exhaust reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
- Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
- Require that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NO_X and PM.
- Require all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.

Mitigation Measure CC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Cañada College

The District will ensure that all off-road diesel-powered equipment used during construction at Cañada College is equipped with EPA Tier 4 or cleaner engines, except for specialized construction equipment for which an EPA Tier 4 engine is not available. The use of Tier 4 engines will also act to reduce ROG and NO_X emissions from construction equipment.

Mitigation Measure CC-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at Cañada College

The District will enter into a development mitigation contract with BAAQMD in order to reduce criteria pollutant emissions generated during construction of the Project to quantities below the numeric BAAQMD thresholds (**Table 3.2-8**). The preferred source of emissions reductions for NO_X, will be through contributions to BAAQMD's Carl Moyer Program and/or other BAAQMD incentive programs.

Implementation of this mitigation would require the District adopt the following specific responsibilities.

- Enter into a mitigation contract with BAAQMD for the Carl Moyer Program and/or other BAAQMD emission reduction incentive program. The necessary reductions must be achieved (contracted and delivered) by the applicable year in question (i.e., emissions generated in year 2016 would need to be reduced offsite in 2016). Funding would need to be received prior to contracting with participants and should allow sufficient time to receive and process applications to ensure offsite reduction projects are funded and implemented prior to commencement of Project activities being reduced. In negotiating the terms of the mitigation contract, the Project applicant and BAAQMD should seek clarification and agreement on BAAQMD responsibilities, including the following.
    - Identification of appropriate offsite mitigation fees required for the Project.
    - Timing required for obtaining necessary offsite emission credits.
    - Processing of mitigation fees paid by the Project applicant.
    - Verification of emissions inventories submitted by the Project applicant.
    - Verification that offsite fees are applied to appropriate mitigation programs within the SFBAA.
- Quantify mitigation fees required to satisfy the appropriate reductions. Funding for the emission reduction projects will be provided in an amount up to the emission reduction project cost-effectiveness limit set by for the Carl Moyer Program during the year that the emissions from construction are emitted. (The current Carl Moyer cost-effectiveness limit is $18,030 /weighted ton of criteria pollutants [NOX + ROG + (20*PM)]). An administrative fee of 5% would be paid by the Project applicant to the BAAQMD to implement the program. The funding would be used to fund projects eligible for funding under the Carl Moyer Program guidelines or other BAAQMD emission reduction incentive program meeting the same cost-effectiveness threshold that are real, surplus, quantifiable, and enforceable.
- Develop a compliance program to calculate emissions and collect fees from the construction contractors for payment to BAAQMD. The program will require, as a standard or specification of their construction contracts with the Project Sponsor, that construction contractors identify construction emissions and their share of required offsite fees, if applicable. Based on the emissions estimates, the Project applicant will collect fees from the individual construction contractors (as applicable) for payment to BAAQMD. Construction contractors will have the discretion to reduce their construction emissions to the lowest possible level through additional onsite mitigation, as the greater the emissions reductions that can be achieved by onsite mitigation, the lower the required offsite fee. Acceptable

options for reducing emissions may include use of late-model engines, low-emission diesel products, additional electrification or alternative fuels, engine-retrofit technology, and/or after-treatment products. All control strategies must be verified by BAAQMD.

- Conduct daily and annual equipment activity monitoring to ensure onsite emissions reductions are achieved and no additional mitigation payments are required. Excess offsite funds can be carried from previous to subsequent years in the event that additional reductions are achieved by onsite mitigation. At the end of the Project, if it is determined that excess offset funds remain (outstanding contracts and administration over the final years of the contracts will be taken into consideration), BAAQMD and the Project applicant will determine the disposition of final funds (e.g., additional emission reduction projects to offset underperforming contracts, return of funds to the Project applicant, etc.).

Mitigation Measure CC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Cañada College

The District will require all construction contractors to implement the basic construction mitigation measures recommended by BAAQMD to reduce fugitive dust emissions. Emission reduction measures will include, at a minimum, the following measures. Additional measures may be identified by BAAQMD or the contractor as appropriate.

- All exposed surfaces affected by construction (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) will be watered two times per day, or as needed during the dry season(s) (unless limited by state or local drought response requirements or if there is a rain event).
- All haul trucks transporting soil, sand, or other loose material off site will be covered.
- All visible mud or dirt track-out onto adjacent public roads will be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads will be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved will be completed as soon as possible. Building pads will be laid as soon as possible after grading unless seeding or soil binders are used.
- A publicly visible sign will be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person will respond and take corrective action within 48 hours. BAAQMD's phone number will also be visible to ensure compliance with applicable regulations.

Impact CC-AQE-3: Violate a BAAQMD air quality standard or substantially contribute to an existing or projected air quality violation during Project operation (less than significant)

Long-term operational emissions associated with both existing and Project uses were quantified using the most recent version of CalEEMod (version 2013.2.2), operational information provided by the District, and traffic data provided by Hexagon Transportation Consultants (Hexagon 2015). A discussion of the methodology utilized herein is contained within Section 3.2.3.1, *Methodology*, supported by data in **Appendix B.**

Estimated operational emissions from mobile sources associated with the new Building 1, Kinesiology/Wellness, as well as projected vehicle trips to the Cañada College campus from student and staff that reside in the new residential complex at the Skyline College campus, are shown in **Table 3.2-10**. Emissions from the vehicle trips to Cañada College associated with Skyline College are split evenly between the two campuses, as trips would originate at Skyline College and end at Cañada College.

Table 3.2-10. Cañada College Operational Mobile Source Emissions (tons/year)

Category	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Kinesiology/Wellness Building	0.3	0.5	2.8	<0.1	0.5	<0.1	0.5	0.1	<0.1	0.1
Trips to Cañada from Skyline College Residential Complex	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total	**0.3**	**0.5**	**2.8**	**<0.1**	**0.5**	**<0.1**	**0.5**	**0.1**	**<0.1**	**0.1**
BAAQMD Threshold	*10*	*10*	*CAAQS*	--	*BMPs*	*15*	--	*BMPs*	*10*	--
BAAQMD Threshold Exceeded?	*No*	*No*				*No*			*No*	

ROG = reactive organic gases
NO_x = nitrogen oxides
CO = carbon monoxide
SO_x = sulfur oxides
PM10 = particulate matter
PM2.5 = fine particulate matter

Estimated operational emissions for the existing buildings that will be demolished and replaced by proposed buildings associated with the Project are summarized in **Table 3.2-11**, as well as net operational emissions (Project – existing) associated with demolished and replaced buildings.

Estimated operational emissions from area, energy, water, and waste sources, excluding mobile sources, from the new Building 1, Kinesiology/Wellness, are included in the values presented in **Table 3.2-11**.

The presentation of mobile source emissions separate from other operational source emissions is due to the assumption that total vehicle trips to Cañada College would not change as a result of Project implementation, excepting the increase in vehicle trips from the new Kinesiology/Wellness building and trips from the proposed residential complex at the Skyline Campus. It is assumed the trips associated with the Kinesiology/Wellness Building would be associated with offsite users, as students, faculty, and staff accessing the facilities would already be traveling to the campus, or taking non-motor vehicle trips to the facility from the Cañada Vista Residences or other onsite campus locations (Kuo pers. comm.).

In addition, it is anticipated there would be new trips to the Cañada College campus from the proposed residences at the Skyline College campus. Only the new vehicle trips due to the Kinesiology/Wellness building and trips from the proposed residential complex at the Skyline Campus are represented in **Table 3.2-10**, while all other vehicle trips to the campus associated with current buildings that would be replaced are represented in **Table 3.2-11** in the category titled *Mobile*.

Table 3.2-11. Cañada College Net Operational Emissions for Replaced Buildings (tons/year)

Category	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Existing buildings to be demolished										
Area	0.2	0	<0.1	0	0	0	0	0	0	0
Energy	<0.1	0.1	0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1
Mobile	0.4	0.8	4.4	<0.1	0.9	<0.1	0.9	0.2	<0.1	0.3
Total	**0.6**	**0.9**	**4.5**	**<0.1**	**0.9**	**<0.1**	**0.9**	**0.2**	**<0.1**	**0.3**
Proposed buildings to replace existing demolished buildings										
Area	0.6	<0.1	<0.1	0	0	0	0	0	0	0
Energy	<0.1	0.2	0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1
Mobile	0.4	0.8	4.4	<0.1	0.9	<0.1	0.9	0.2	<0.1	0.3
Total	**1.1**	**1.0**	**4.6**	**<0.1**	**0.9**	**<0.1**	**0.9**	**0.2**	**<0.1**	**0.3**
Net Emissions (Proposed – Existing)	**0.4**	**0.1**	**0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**0**	**<0.1**	**<0.1**
BAAQMD Threshold	*10*	*10*	*CAAQS*	*--*	*BMPs*	*15*	*--*	*BMPs*	*10*	*--*
BAAQMD Threshold Exceeded?	*No*	*No*				*No*			*No*	

ROG = reactive organic gases
NO_x = nitrogen oxides
CO = carbon monoxide
SO_x = sulfur oxides
PM10 = particulate matter
PM2.5 = fine particulate matter

The difference in operational emissions between the Project and the existing uses represents the net impact of the Project, which is then compared to BAAQMD thresholds. Operational emissions associated with the Project include emissions reductions from the proposed 250 kWh per year cogeneration system and water use efficiency measures associated with the District's sustainability plan (Fullerton pers. comm.). Electricity and natural gas usage were conservatively assumed to remain constant (although the proposed new buildings will be more energy efficient on a square footage basis than existing buildings, they will be larger). Estimated total operational emissions for the entire Cañada College campus are shown in **Table 3.2-12**.

As shown in **Table 3.2-12**, operation of the Project is expected to result in small increases in all criteria pollutant emissions over existing conditions. However, net increases for all criteria pollutant emissions are below BAAQMD's significance thresholds. Therefore, the operational impact would be less than significant. No mitigation is required.

Table 3.2-12. Cañada College Total Unmitigated Operational Emissions (tons/year)

Category	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Mobile Sources (Table 3.2-10)	0.3	0.5	2.8	<0.1	0.5	<0.1	0.5	0.1	<0.1	0.1
Net Demolished and Replaced Building (Table 3.2-11)	0.4	0.1	0.1	<0.1	<0.1	<0.1	<0.1	0	<0.1	<0.1
Total	**0.7**	**0.6**	**2.9**	**<0.1**	**0.5**	**<0.1**	**0.5**	**0.1**	**<0.1**	**0.2**
BAAQMD Threshold	*10*	*10*	*CAAQS*	*--*	*BMPs*	*15*	*--*	*BMPs*	*10*	*--*
BAAQMD Threshold Exceeded?	*No*	*No*				*No*			*No*	

ROG = reactive organic gases
NO_x = nitrogen oxides
CO = carbon monoxide
SO_x = sulfur oxides
PM10 = particulate matter
PM2.5 = fine particulate matter

Impact CC-AQE-4: Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment (less than significant with mitigation)

BAAQMD has identified project-level thresholds to evaluate criteria pollutant impacts (**Table 3.2-8**). In developing these thresholds, BAAQMD considered levels at which project emissions would be cumulatively considerable. As noted in its CEQA Guidelines (2011a)

> In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is unnecessary.

The criteria pollutant thresholds presented in **Table 3.2-8** therefore represent the maximum emissions the Project may generate before contributing to a cumulative impact on regional air quality. Consequently, exceedances of the project-level thresholds would be cumulatively considerable. As discussed in Impact CC-AQE-2, with implementation of **Mitigation Measures CC-AQE-1** through **CC-AQE-5,** construction emissions associated with the Project are expected to not exceed BAAQMD's quantitative thresholds. Therefore, this impact would be less than significant.

Mitigation Measure CC-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at Cañada College

This measure is described under Impact CC-AQE-2.

Mitigation Measure CC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Cañada College

This measure is described under Impact CC-AQE-2.

Mitigation Measure CC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Cañada College

This measure is described under Impact CC-AQE-2.

Mitigation Measure CC-AQE-4: Offset NO_X Emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at Cañada College

This measure is described under Impact CC-AQE-2.

Mitigation Measure CC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Cañada College

This measure is described under Impact CC-AQE-2.

Impact CC-AQE-5: Expose existing sensitive receptors to substantial pollutant concentrations during construction (less than significant with mitigation)

This impact discussion addresses both construction-related health risks from DPM and PM.25 and carbon monoxide hot spots.

Construction-Related Health Risks from DPM and PM2.5 Emissions

Project construction would generate PM2.5 and DPM, resulting in the exposure of nearby existing sensitive receptors (e.g., residences) to increased PM2.5 concentrations and health risks associated with DPM. Exposure dissipates as a function of distance from the emissions source; thus, BAAQMD has determined that construction activities occurring at distances of greater than 1,000 feet from a sensitive receptor likely do not pose a significant health risk.

As shown in **Table 3.2-4**, several sensitive receptors are located within 1,000 feet of the campus. **Table 3.2-13** summarizes project-related DPM, PM2.5, and acute and chronic non-cancer risks (hazard index [HI]) associated with project construction activities for the maximum exposed individual (MEI). Estimated health risks in **Table 3.2-13** assume implementation of **Mitigation Measures CC-AQE-2, CC-AQE-3,** and **CC-AQE-5**.

Table 3.2-13. Project-Level Cancer, Non-Cancer (HI) and PM2.5 Concentrations during Construction at Cañada College

College	Increased Cancer Risk (per million)	Non-Cancer (HI)	Annual PM2.5 Concentration ($\mu g/m^3$)
Onsite Residences	1.1	0.001	0.00
Offsite Residences	3.5	0.002	0.01
BAAQMD Threshold	10	1.0	0.3
Exceed BAAQMD Threshold?	No	No	No

$\mu g/m^3$ = microgram per cubic meter

As shown in **Table 3.2-13**, construction of the Project would not result in cancer risks in excess of BAAQMD's thresholds. This would be a less than significant impact.

Mitigation Measure CC-AQE-3 would require the use of Tier 4 or equivalent construction equipment onsite to reduce offsite exposure to project-related DPM emissions. It is anticipated that use of Tier 4 equipment would reduce onsite DPM emissions and risk by approximately 90%

relative to unmitigated emissions. Implementation of **Mitigation Measure CC-AQE-3** would therefore reduce cancer risk for the MEI offsite to approximately 3.55 per million, which is below BAAQMD's threshold. Accordingly, this impact would be less than significant.

There are multiple stationary sources within 1,000 feet of the Project area that generate DPM and PM2.5. These emissions contribute to elevated background concentrations of DPM and PM2.5, which when combined with emissions from Project construction, could contribute to a cumulative health risk. Accordingly, consistent with BAAQMD's CEQA Guidelines, cumulative exposure to DPM and PM2.5 was evaluated by adding background health risks to the estimated construction health risks for the Project (**Table 3.2-13**).

The results of the cumulative impact assessment are presented in **Table 3.2-14**, which summarizes individual health risk contributions of sources within 1,000 feet, as well as estimated construction health risks at the MEI for the Project. Estimated health risks in **Table 3.2-14** assume implementation of **Mitigation Measures CC-AQE-2, CC-AQE-3,** and **CC-AQE-5**.

Table 3.2-14 Cumulative Cancer, Chronic (HI), and PM2.5 Health Risks during Project Construction at Cañada College

Source ID/Name	Increased Cancer Risk (per million)	Non-Cancer (HI)	PM2.5 Exposure ($\mu g/m^3$)
Contribution from Ambient Sources			
Interstate 280	2.94	0.003	0.05
Contribution from Project Construction			
Onsite Residences	1.18	0.001	0.00
Offsite Residences	3.5	0.002	0.01
Cumulative Risk			
Onsite Residences	4.02	0.0004	0.05
Offsite Residences	6.49	0.005	0.06
BAAQMD Thresholds	100	10.0	0.8
Exceed BAAQMD Threshold?	No	No	No

$\mu g/m^3$ = microgram per cubic meter

As shown in **Table 3.2-14**, with implementation of **Mitigation Measures CC-AQE-2, CC-AQE-3,** and **CC-AQE-5**, construction of the project would not result in PM2.5 concentrations or cancer and non-cancer risks in excess of BAAQMD's cumulative thresholds. Consequently, this impact would be less than significant.

Mitigation Measure CC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Cañada College

This measure is described under Impact CC-AQE-2.

Mitigation Measure CC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Cañada College

This measure is described under Impact CC-AQE-2.

Mitigation Measure CC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Cañada College

This measure is described under Impact CC-AQE-2.

Carbon Monoxide Hot Spots

The Project would expose existing and new sensitive receptors (students and residences) to cumulative DPM concentrations. With respect to pollutant concentrations and nearby roadways, BAAQMD has established screening criteria for evaluating CO concentrations. According to BAAQMD's (2011a) CEQA Guidelines, a proposed project would result in a less-than-significant impact on localized CO concentrations if the following screening criteria are met.

1. The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Traffic generated by the Project would not have the potential to create CO hot spots at nearby roadways and intersections. Based on traffic data provided by the District and Hexagon Transportation Consultants (**Appendix E**), the maximum peak hour traffic volumes at nearby intersections affected by the project are estimated at 2,208 for the Woodhill Drive/Farm Hill Boulevard intersection. This volume is far below the BAAQMD's screening criteria of 24,000 and 44,000 vehicles per hour. Therefore, the screening criteria are met, no further analysis is warranted, and no CO hot spots are anticipated to result from the Project. This impact is less than significant, and no mitigation is required.

Impact CC-AQE-6: Create objectionable odors affecting substantial number of people (less than significant)

Although offensive odors rarely cause any physical harm, they can be unpleasant and lead to considerable distress among the public. This distress may often generate citizen complaints to local governments and air districts. Any project with the potential to frequently expose the public to objectionable odors would be deemed as one having a significant impact.

According to ARB's (2005) *Air Quality and Land Use Handbook*, land uses associated with odor complaints typically include sewage treatment plants, landfills, recycling facilities, and manufacturing. Odor impacts on residential areas and other sensitive receptors, such as hospitals, daycare centers, schools, etc., warrant the closest scrutiny; but consideration should also be given to other land uses where people may congregate, such as recreational facilities, work sites, and commercial areas.

Potential odor sources during construction activities include diesel exhaust from heavy-duty equipment and the use of architectural coatings and asphalt. Construction-related operations near existing receptors would be temporary in nature, and construction activities would not be likely to result in nuisance odors that would violate BAAQMD Regulation 7 (Odorous Substances).

Potential odor source during Project operations would include diesel exhaust from ongoing trash pick-up and the use of architectural coatings. However, odor impacts associated with the Project would be limited. Accordingly, operation of the Project is not expected to result in odor impacts that would exceed the BAAQMD's odor thresholds (**Table 3.2-8**). This impact is considered less than significant. No mitigation is required.

Impact CC-AQE-7: Lead to a wasteful, inefficient, and unnecessary usage of energy (less than significant)

Project construction would consume gasoline and diesel through operation of heavy-duty construction equipment and vehicles. Materials manufacturing would also consume energy, although information on the intensity and quantity of fuel used during manufacturing is currently unknown and beyond the scope of project-level environmental analyses. An analysis of energy associated with materials manufacturing is considered speculative and is not presented in this EIR. This analysis focuses on energy associated with physical construction of the Project (i.e., fuel consumed by heavy-duty equipment and vehicles).

Based on the GHG emissions analysis summarized in Section 3.6, *Greenhouse Gas Emissions*, and the rate of CO_2 emitted per gallon of fuel consumed, energy use associated with Project construction was calculated and estimated to result in the one-time consumption of 381,474 million BTU. Concrete from demolished building materials would be recycled onsite for use in new Project building construction and would help reduce lifecycle energy associated with construction materials. Once operational, occupancy of the Project would generate vehicle trips from daily resident access from the proposed Skyline College residential complex, as well as from Building 1, Kinesiology/Wellness. Project operations would also result in the consumption of electricity and natural gas for power and heating. Gasoline and diesel consumed by onroad vehicles, as well as electricity and natural gas consumed by operation of Building 1, Kinesiology/Wellness, represents the long-term operational energy impact associated with the project.

Energy consumed by operational onroad vehicles was quantified using the VMT estimate developed by the air quality analysis (**Appendix B**). Based on the nature of college campuses, it is anticipated that onsite students and faculty would travel to Building 1, Kinesiology/Wellness, by taking non-motor vehicle trips from within the campus without using an external roadway, as they are already located onsite (known as *internalization*), which would result in vehicle trip and corresponding fuel consumption reductions associated with these types of trips. Trips made by walking instead of personal vehicles would also contribute to trip and fuel use reductions.

Operational energy consumption (expressed in terms of million BTU) at full buildout in 2027 is summarized in **Table 3.2-15**.

Table 3.2-15. Estimated Annual Operational Energy Consumption for the Project at Cañada College

Condition	Million BTU/Year[1]	Million BTU/Year[2]
Onroad mobile sources	17,993	17,993
Electricity Consumption	4,782	2,869
Natural Gas Consumption	5,599	3,359
Total Energy Consumption	28,374	24,221

[1] Does not include on-campus energy generation from proposed cogeneration plant or reduction in energy consumption from exceedance of Title 24 standards.

[2] Includes on-campus energy generation from proposed cogeneration plant and reduction in energy consumption from exceedance of Title 24 standards.

BTU = British thermal units

As shown in **Table 3.2-15**, long-term operation of the Project would result in an increase in energy usage (onroad fuel consumption, electricity, and natural gas), relative to existing conditions of 14,654 million BTU per year. With respect to onroad vehicles, the Project would improve energy efficiency and fuel consumption. This is consistent with the Energy Policy Act and AB 2076, both of which strive to reduce dependency on petroleum demand.

Many of these electricity and natural gas reductions are achieved by exceeding the CalGreen and Title 24 energy code requirements and following associated standards such as American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1. All new building construction on the Cañada College campus would target LEED Gold certification, and all new and modernization and renovation projects would exceed the California Building Code Title 24 2013 Energy Efficiency Standards by at least 15% or exceed 2010 ASHRAE Energy Standard for Low Rise Buildings 90.1 by 20%. The Project would also include renewable energy installations such as photovoltaic arrays, solar thermal systems, and a 250 kWh per year cogeneration system. Specifically, the Project could include the following sustainability strategies.

- Install LED lighting in the parking lot expansions, for reduced energy use in comparison to standard lighting.
- Recycle onsite concrete building materials and reincorporate the recycled materials into the work for demolition projects.
- Distribute any reclaimed non-potable water in purple piping for landscape irrigation.
- Capture and reuse condensate and wastewater from pools or other water features for reuse.
- Install low-flow fixtures including lavatories, showers, kitchen sinks, urinals, and toilets.
- Target diversion of 75% of all solid waste from the landfill by recycling by 2020.
- Use local materials that are low in VOCs and/or contain high amounts or recycled content.
- Commit to net zero increase in stormwater runoff and systems designed to effectively manage quantity of stormwater flows while protecting local stream water quality.
- Implement advanced energy efficiency design approaches.

The District Board of Trustees has established sustainability goals and each campus has a Sustainability Plan which includes the college's visions, goals, and objectives for sustainability, as well as strategies to meet these goals. The proposed facility improvements at each of the campuses would be consistent with the visions, goals, and objectives in the respective Sustainability Plans.

Because the Project is consistent with state and local energy policies, the Project would not result in a wasteful, inefficient, and unnecessary usage of energy. This impact would be less than significant. No mitigation is required.

College of San Mateo

Impact CSM-AQE-1: Conflict with or obstruct implementation of an applicable air quality plan (less than significant)

San Mateo County is currently designated a nonattainment area for federal ozone and PM2.5, standards, a maintenance area for the federal CO standard, and nonattainment for state ozone, PM10, and PM2.5 standards (**Table 3.2-3**). The most recent federal attainment plans are the 2001 Ozone Attainment Plan and the 1994 CO Redesignation Request and Maintenance Plan. The most

recent state air quality plan is the 2010 Clean Air Plan, which provides an integrated strategy to control ozone, PM, TACs, and GHG emissions. The BAAQMD plans estimate future emissions in the SFBAAB and determine strategies necessary for emissions reductions through regulatory controls. Emissions projections are based on population, vehicle, and land use trends typically developed by the BAAQMD, MTC, and ABAG.

A project is deemed inconsistent with air quality plans if it would result in population and/or employment growth that exceeds estimates used to develop applicable air quality plans. Projects that propose development that is consistent with the growth anticipated by the relevant land use plans would be consistent with the current BAAQMD air quality plans. Likewise, projects that propose development that is less dense than anticipated within a general plan (or other governing land use document) would be consistent with the air quality plans because emissions would be less than estimated for the region. If a project proposes development that is greater than that anticipated growth projections, the project would be in conflict with the BAAQMD air quality plans, and might have a potentially significant impact on air quality because emissions would exceed those estimated for the region. This situation would warrant further analysis to determine if a proposed project and surrounding projects would exceed the growth projections used in the BAAQMD air quality plans for a specific subregional area.

The most relevant land use plan for CSM is the City of San Mateo General Plan and related documents. Similarly, the Project's inclusion of sustainable renovation improvements to existing buildings and installation of renewable energy systems would be consistent with City policy. Accordingly, the Project is considered consistent with growth projection in the most relevant land use plan.

The Project is consistent with the BAAQMD's 2010 CAP strategies and control measures, including TCM-D-2 (Pedestrian Access and Facilities Improvements) and ECM 2 (Renewable Energy). TCM-D-2 will improve pedestrian facilities and encourage walking by funding projects that improve pedestrian access to transit, employment and major activity centers. Improvements may include sidewalks/paths, benches, reduced street width, reduced intersection turning radii, crosswalks with activated signals, curb extensions/bulbs, buffers between sidewalks and traffic lanes, and street trees. ECM 2 promotes incorporation of renewable energy sources into new developments and redevelopment projects.

The Project also includes numerous energy conservation measures including, but not limited to all new building construction, at the CSM campus would target LEED Gold certification, and all new modernization and renovation projects would exceed the California Building Code Title 24 2013 Energy Efficiency Standards by at least 15%. Project measures would act to reduce project-related area and mobile source emissions, relative to traditional community college uses. While emissions will be generated during construction and operation (discussed below), these emissions are neither expected to exceed BAAQMD significance thresholds nor impede attainment or maintenance of the NAAQS or CAAQS.

Because the Project would not conflict with any applicable land use plan or policy, is consistent with recent growth projections for the region, contributes to the City's long-term vision for sustainable growth, is consistent with measures in BAAQMD's 2010 CAP, and long-term Project emissions would not exceed BAAQMD's significance threshold, it would not conflict with or obstruct implementation of the current BAAQMD air quality plans. Therefore, the impact would be less than significant. No mitigation is required.

Impact CSM-AQE-2: Violate of a BAAQMD air quality standard or substantially contribute to an existing or projected air quality violation during Project construction (less than significant with mitigation)

Project construction has the potential to create air quality impacts through the use of heavy-duty construction equipment, construction worker vehicle trips, truck hauling trips, and offgassing from paving and coatings. In addition, fugitive dust emissions would result from demolition of existing structures, excavation, and grading. Mass criteria pollutant emissions generated by these sources were quantified using emission factors and methodologies within CalEEMod (version 2013.2.2), EMFAC 2011, road dust methodology from EPA, and information provided by the District.

Estimated construction emissions are summarized in **Table 3.2-16**. Maximum daily emissions for each year of construction are due to overlapping activities, based on the project schedule and phasing information provided by the District. Detailed information on emissions modeling and quantification methods can be found in **Appendix B**.

As shown in **Table 3.2-16**, construction of the Project would generate NO_X exhaust in excess of the BAAQMD's numeric thresholds during the year 2019 without implementation of mitigation. **Mitigation Measures CSM-AQE-1** through **CSM-AQE-4** are required to reduce NO_X emissions to a less-than-significant level, with **Mitigation Measures CSM-AQE-1** through **CSM-AQE-3** reducing all emissions to below the BAAQMD's thresholds[4]. Note the BAAQMD *CEQA Guidelines* consider dust impacts to be less than significant through the application of BAAQMD-recommended BMPs. Therefore, implementation of **Mitigation Measure CSM-AQE-5** would reduce construction-related fugitive dust emissions to ensure fugitive dust impacts are less than significant.

Mitigation Measure CSM-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo

This measure is the same as Mitigation Measure CC-AQE-1 described under Impact CC-AQE-2 but would be implemented at the College of San Mateo.

Mitigation Measure CSM-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo

This measure is the same as Mitigation Measure CC-AQE-2 described under Impact CC-AQE-2 but would be implemented at the College of San Mateo.

Mitigation Measure CC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at the College of San Mateo

This mitigation is the same as Mitigation Measure CC-AQE-3 described under Impact CC-AQE-2 but would be implemented at the College of San Mateo.

[4] In the event **Mitigation Measures CSM-AQE-1** through **CSM-AQE-3** are not sufficient to reduce emissions below the BAAQMD's construction thresholds, **Mitigation Measure CSM-AQE-4** would also ensure construction emissions are offset to below BAAQMD's thresholds to a less-than-significant level.

Table 3.2-16. College of San Mateo Daily Construction Emissions (pounds/day)

Unmitigated										
Year	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
2016	2.7	22.6	18.5	0.0	0.2	1.6	1.8	0.1	1.5	1.6
2017	8.0	76.2	56.3	0.1	5.6	5.0	9.8	3.0	4.6	6.9
2018	8.3	73.5	52.5	0.1	0.5	4.6	5.1	0.1	4.3	4.4
2019	9.0	82.3	68.4	0.1	1.7	4.6	6.3	0.4	4.3	4.7
2020	5.1	43.5	34.0	0.1	0.5	2.5	3.0	0.1	2.4	2.5
2021	5.1	43.8	40.3	0.1	0.6	2.4	2.9	0.2	2.2	2.4
2022	5.3	48.0	35.4	0.1	0.3	3.3	3.7	0.1	3.1	3.2
2023	2.6	25.4	16.9	0.0	0.2	1.7	1.9	0.0	1.6	1.6
2024	1.0	8.2	12.6	0.0	0.2	0.4	0.6	0.1	0.4	0.4
Daily Maximum	**9.0**	**82.3**	**68.4**	**0.1**	**5.6**	**5.0**	**9.8**	**3.0**	**4.6**	**6.9**
BAAQMD Threshold	*54*	*54*	--	--	*BMPs*	*82*	--	*BMPs*	*54*	--
BAAQMD Threshold Exceeded?	*No*	*Yes*				*No*			*No*	
Mitigated										
Year	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
2016	1.5	12.1	18.5	0	0.2	0.1	0.3	0.1	0.1	0.2
2017	4.6	40.9	56.3	0.1	5.6	0.3	5.9	3	0.3	3.3
2018	4.7	39.5	52.5	0.1	0.5	0.3	0.8	0.1	0.3	0.4
2019	5.1	44.2	68.4	0.1	1.7	0.3	2.0	0.4	0.3	0.7
2020	2.9	23.4	34	0.1	0.5	0.2	0.7	0.1	0.2	0.3
2021	2.9	23.5	40.3	0.1	0.6	0.2	0.8	0.2	0.2	0.4
2022	3.0	25.8	35.4	0.1	0.3	0.2	0.5	0.1	0.2	0.3
2023	1.5	13.6	16.9	0	0.2	0.1	0.3	0	0.1	0.1
2024	0.6	4.4	12.6	0	0.2	0.0	0.2	0.1	0.0	0.1
Daily Maximum	**5.1**	**44.2**	**68.4**	**0.1**	**5.6**	**0.3**	**5.9**	**3.0**	**0.3**	**3.3**
BAAQMD Threshold	*54*	*54*	--	--	*BMPs*	*82*	--	*BMPs*	*54*	--
BAAQMD Threshold Exceeded?	*No*	*No*				*No*			*No*	

ROG = reactive organic gases
NO_x = nitrogen oxides
CO = carbon monoxide
SO_x = sulfur oxides
PM10 = particulate matter
PM2.5 = fine particulate matter

Mitigation Measure CSM-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at the College of San Mateo

This mitigation is the same as Mitigation Measure CC-AQE-4 described under Impact CC-AQE-2 but would be implemented at the College of San Mateo.

Mitigation Measure CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 Dust at the College of San Mateo

This mitigation is the same as Mitigation Measure CC-AQE-5 described under Impact CC-AQE-2 but would be implemented at the College of San Mateo.

Impact CSM-AQE-3: Violate a BAAQMD air quality standard or substantially contribute to an existing or projected air quality violation during Project operation (less than significant)

Long-term operational emissions associated with both existing and Project uses were quantified using the most recent version of CalEEMod (version 2013.2.2), operational information provided by the District, and traffic data provided by Hexagon Transportation Consultants (**Appendix E**). A thorough discussion of the methodology utilized herein is contained within Section 3.2.3.1, *Methodology*.

Estimated operational emissions from projected vehicle trips to the CSM campus from student and staff that reside in the new residential complex at the Skyline campus are shown in **Table 3.2-17**. Emissions from the vehicle trips to CSM associated with Skyline College are split evenly between the two campuses, as trips would originate at Skyline College and end at CSM. Estimated operational emissions for the existing buildings that will be demolished and replaced by proposed buildings associated with the Project are summarized in **Table 3.2-18**, as well as net operational emissions (Project – existing) associated with demolished and replaced buildings. The presentation of mobile source emissions separate from other operational source emissions is due to the assumption that total vehicle trips to CSM would not change as a result of Project implementation, excepting the increase in vehicle trips from the residential complex at Skyline College. Only the new vehicle trips due to the residential complex are represented in **Table 3.2-17** while all other vehicle trips to the campus are represented in **Table 3.2-18** in the category titled *Mobile*. The difference in operational emissions between the Project and the existing uses represents the net impact of the Project, which is compared to BAAQMD thresholds. Operational emissions associated with the Project include emissions reductions from the proposed 800,000 kWh per year solar photovoltaic renewable energy installation, the proposed 250 kWh per year cogeneration system, and water use efficiency measures associated with the District's sustainability plan (Fullerton pers. comm.). Electricity and natural gas usage were conservatively assumed to remain constant (although the proposed buildings would be more energy efficient on a square footage basis than existing buildings, they would be larger). Estimated total operational emissions for the entire CSM campus are shown in **Table 3.2-19**.

Table 3.2-17. College of San Mateo Operational Mobile Source Emissions (tons/year)

Category	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Trips to CSM from Skyline College Residential Complex	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
BAAQMD Threshold	*10*	*10*	*CAAQS*	--	*BMPs*	*15*	--	*BMPs*	*10*	--
BAAQMD Threshold Exceeded?	*No*	*No*				*No*			*No*	

ROG = reactive organic gases
NO_x = nitrogen oxides
CO = carbon monoxide
SO_x = sulfur oxides
PM10 = particulate matter
PM2.5 = fine particulate matter

Table 3.2-18. College of San Mateo Net Operational Emissions for Replaced Buildings (tons/year)

Category	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Existing buildings to be demolished										
Area	0.5	<0.1	<0.1	0	0	0	0	0	0	0
Energy	<0.1	0.4	0.3	<0.1	0	<0.1	<0.1	0	<0.1	<0.1
Mobile	1.5	3.1	16.3	<0.1	2.2	<0.1	2.2	0.6	<0.1	0.6
Total	**2.0**	**3.4**	**16.6**	**<0.1**	**2.2**	**0.1**	**2.3**	**0.6**	**0.1**	**0.7**
Proposed buildings to replace existing demolished buildings										
Area	0.6	<0.1	<0.1	0	0	0	0	0	0	0
Energy	<0.1	0.3	0.2	<0.1	0	<0.1	<0.1	0	<0.1	<0.1
Mobile	1.0	1.7	9.5	<0.1	2.2	<0.1	2.2	0.6	<0.1	0.6
Total	**1.6**	**2.0**	**9.7**	**<0.1**	**2.2**	**0.1**	**2.2**	**0.6**	**<0.1**	**0.6**
Net Emissions (Proposed – Existing)	**-0.4**	**-1.4**	**-6.8**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**0**	**<0.1**	**<0.1**
BAAQMD Threshold	*10*	*10*	*CAAQS*	--	*BMPs*	*15*	--	*BMPs*	*10*	--
BAAQMD Threshold Exceeded?	*No*	*No*				*No*			*No*	

ROG = reactive organic gases
NO_x = nitrogen oxides
CO = carbon monoxide
SO_x = sulfur oxides
PM10 = particulate matter
PM2.5 = fine particulate matter

Table 3.2-19. College of San Mateo Total Unmitigated Operational Emissions (tons/year)

Category	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Mobile Sources (Table 3.2-17)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Net Demolished and Replaced Buildings (Table 3.2-18)	-0.4	-1.4	-6.8	<0.1	<0.1	<0.1	<0.1	0	<0.1	<0.1
Total	**-0.4**	**-1.4**	**-6.8**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**0**	**<0.1**	**<0.1**
BAAQMD Threshold	*10*	*10*	*CAAQS*	*--*	*BMPs*	*15*	*--*	*BMPs*	*10*	*--*
BAAQMD Threshold Exceeded?	*No*	*No*				*No*			*No*	

ROG = reactive organic gases
NO_x = nitrogen oxides
CO = carbon monoxide
SO_x = sulfur oxides
PM10 = particulate matter
PM2.5 = fine particulate matter

As shown in **Table 3.2-19**, operation of the Project is expected to result in small increases or even decreases in criteria pollutant emissions over existing conditions. However, net increases for all criteria pollutant emissions are below BAAQMD's significance thresholds. Therefore, the operational impact would be less than significant. No mitigation is required.

Impact CSM-AQE-4: Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment (less than significant with mitigation)

BAAQMD has identified project-level thresholds to evaluate criteria pollutant impacts (**Table 3.2-8**). In developing these thresholds, BAAQMD considered levels at which project emissions would be cumulatively considerable. As noted in its CEQA Guidelines (2011a):

> In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is unnecessary.

The criteria pollutant thresholds presented in **Table 3.2-8** therefore represent the maximum emissions the Project may generate before contributing to a cumulative impact on regional air quality. Consequently, exceedances of the Project-level thresholds would be cumulatively considerable. As discussed in Impact CSM-AQE-2, construction emissions associated with the Project are expected to not exceed BAAQMD's quantitative thresholds after implementation of mitigation. Therefore, with implementation of **Mitigation Measures CSM-AQE-1** through **CSM-AQE-4**, this impact would be less than significant.

Mitigation Measure CSM-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo

This measure is the same as Mitigation Measure CC-AQE-1 described under Impact CC-AQE-2 but would be implemented at the College of San Mateo.

Mitigation Measure CSM-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo

This measure is the same as Mitigation Measure CC-AQE-2 described under Impact CC-AQE-2 but would be implemented at the College of San Mateo.

Mitigation Measure CC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at the College of San Mateo

This measure is the same as Mitigation Measure CC-AQE-3 described under Impact CC-AQE-2 but would be implemented at the College of San Mateo.

Mitigation Measure CSM-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at the College of San Mateo

This measure is the same as Mitigation Measure CC-AQE-4 described under Impact CC-AQE-2 but would be implemented at the College of San Mateo.

Mitigation Measure CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at the College of San Mateo

This measure is the same as Mitigation Measure CC-AQE-5 described under Impact CC-AQE-2 but would be implemented at the College of San Mateo.

Impact CSM-AQE-5: Exposure of existing sensitive receptors to substantial pollutant concentrations during construction (significant and unavoidable)

This impact discussion addresses both construction-related health risks from DPM and PM.25 and CO hot spots.

Construction-Related Health Risks from DPM and PM2.5 Emissions

Project construction would generate PM2.5 and DPM, resulting in the exposure of nearby existing sensitive receptors (e.g., residences) to increased PM2.5 concentrations and health risks associated with DPM. Exposure dissipates as a function of distance from the emissions source; thus, BAAQMD has determined that construction activities occurring at distances of greater than 1,000 feet from a sensitive receptor likely do not pose a significant health risk.

As shown in **Table 3.2-5**, several sensitive receptors are located within 1,000 feet of the campus, including residences onsite as well as residences, schools, and park offsite. **Table 3.2-20** summarizes project-related DPM, PM2.5, and acute and chronic non-cancer risks (hazard index [HI]) associated with Project construction activities for the MEI for each type of receptor. Estimated health risks in **Table 3.2-20** assume implementation of **Mitigation Measures CSM-AQE-2, CC-AQE-3,** and **CSM-AQE-4**.

As shown in **Table 3.2-20**, construction of the Project would not result in cancer risks in excess of BAAQMD's thresholds. This impact would be less than significant. There are multiple stationary sources within 1,000 feet of the Project area that generate DPM and PM2.5. These emissions contribute to elevated background concentrations of DPM and PM2.5, which when combined with emissions from Project construction, could contribute to a cumulative health risk. Accordingly, consistent with BAAQMD's CEQA Guidelines, cumulative exposure to DPM and PM2.5 was evaluated by adding background health risks to the estimated construction health risks for the Project (**Table 3.2-20**).

Table 3.2-20 Project-Level Cancer, Non-Cancer (HI) and PM2.5 Concentrations during Construction at the College of San Mateo

Receptor	Increased Cancer Risk (per million)	Non-Cancer (HI)	Annual PM2.5 Concentration (µg/m3)
Onsite Residences	5.4	0.002	0.012
Offsite Residences	8.5	0.004	0.020
Offsite School	0.5	0.002	0.009
Offsite Park	0.0	0.000	0.001
BAAQMD Threshold	10	1.0	0.3
Exceed BAAQMD Threshold?	No	No	No

µg/m^3 = microgram per cubic meter

The results of the cumulative impact assessment are presented in **Table 3.2-21**, which summarizes individual health risk contributions of sources within 1,000 feet, as well as estimated construction health risks at the MEI for the Project. Please note that estimated health risks assume implementation of **Mitigation Measures CSM-AQE-2, CSM-AQE-3, CSM-AQE-5**, and **CSM-AQE-6**.

Table 3.2-21 Cumulative Cancer, Chronic (HI), and PM2.5 Health Risks during Project Construction at the College of San Mateo

Source ID/Name	Increased Cancer Risk (per million)	Non-Cancer Hazard Index	PM2.5 Exposure (µg/m^3)
Contribution from Ambient Sources			
Source # 17347	1.62	0.00	0.00
Source # 15349	3.57	0.03	1.56 [1]
SR 92	3.00	0.00	0.03
Contribution from Project Construction			
Onsite Residences [2]	0.97	0.00	0.01
Offsite Residences [3]	8.55	0.00	0.02
Offsite School [3]	0.54	0.00	0.01
Offsite Park [3]	0.02	0.00	0.00
Cumulative			
Onsite Residences [2]	9.16	0.03	0.27
Offsite Residences [3]	9.74	0.03	1.60
Offsite School [3]	8.28	0.03	1.59
Offsite Park [3]	8.19	0.03	1.59
BAAQMD Thresholds	100	10.0	0.8
Exceed BAAQMD Threshold?	No	No	Yes

[1] The background PM2.5 concentrations associated with this source is in excess of the BAAQMD's threshold of 0.8 µ/m^3.
[2] Includes MM CSM-AQE-5 and CSM-AQE-6
[3] Includes MM CSM-AQE-5.
µg/m^3 = microgram per cubic meter

As shown in **Table 3.2-21**, construction of the project would not result in PM2.5 concentrations or cancer and non-cancer risks in excess of BAAQMD's cumulative thresholds with implementation of **Mitigation Measures CSM-AQE-2, CSM-AQE-3, CSM-AQE-5,** and **CSM-AQE-6** at onsite receptors but would result in PM2.5 concentrations in excess of BAAQMD's cumulative thresholds at offsite receptors . Consequently, this impact would be less than significant with mitigation at onsite receptors, but significant and unavoidable with mitigation at offsite receptors.

Mitigation Measure CSM-AQE-3 would require the use of Tier 4 or equivalent construction equipment onsite to reduce onsite and offsite exposure to PM2.5 emissions. It is anticipated that use of Tier 4 equipment would reduce onsite DPM emissions and risk by approximately 90% relative to unmitigated emissions. Implementation of **Mitigation Measure CSM-AQE-3** would therefore reduce cancer risk for the MEI offsite to approximately 9.74 per million, which is below BAAQMD's threshold. Accordingly, this impact (exposure of sensitive receptors to construction-related health risks from DPM and PM2.5) would be less than significant with mitigation.

Mitigation Measure CSM-AQE-6 would require installation of particulate filtration systems on ventilation and recirculation systems in onsite residences with cumulative PM2.5 concentrations above the BAAQMD threshold to reduce indoor exposure to PM2.5 concentrations. According to the EPA (2009), filters with a minimum efficiency reporting value of 15 (MERV-15) achieve a minimum PM2.5 removal efficiency of 85%. Implementation of **Mitigation Measure CSM-AQE-6** would reduce cumulative PM2.5 concentrations at onsite receptors for the MEI to 0.27 $\mu g/m^3$, which is below BAAQMD's threshold. Accordingly, this impact (exposure of sensitive receptors to construction-related DPM and PM2.5 emissions at onsite receptors) would be less than significant with mitigation. However, this installation of particulate filtration systems at offsite residences is considered infeasible. Accordingly, this impact (exposure of sensitive receptors to construction-related DPM and PM2.5 emissions at offsite receptors) would remain significant and unavoidable, as the maximum PM2.5 concentration at offsite receptors would be 1.60 $\mu g/m^3$, above the BAAQMD's threshold of 0.8 $\mu g/m^3$.

Mitigation Measure CSM-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo

This measure is the same as Mitigation Measure CC-AQE-2 described under Impact CC-AQE-2 but would be implemented at the College of San Mateo.

Mitigation Measure CSM-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at the College of San Mateo

This measure is the same as Mitigation Measure CC-AQE-3 described under Impact CC-AQE-5 but would be implemented at the College of San Mateo.

Mitigation Measure CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at the College of San Mateo

This measure is the same as Mitigation Measure CC-AQE-5 described under Impact CC-AQE-2 but would be implemented at the College of San Mateo.

Mitigation Measure CSM-AQE-6: Install filtration systems on ventilation and recirculation systems at the College of San Mateo

The District will install filtration systems on ventilation and recirculation systems within onsite residences where the BAAQMD PM2.5 concentration thresholds are exceeded after application of other onsite construction air quality mitigation measures. All filters must be rated MERV-15 or higher. The District will submit a plan for installation and maintenance of all filters in accordance with the manufacturer's recommendations to the County prior to approval of the first building permits. The onsite plans will be incorporated into the Project's Operations and Maintenance Manual.

In the event that background community risks change due to new or removed sources, revised modeling will be required before changes to the filtration system can be incorporated into the building design. The modeling would be included in a proposal submitted to the County for review and approval prior to issuance of building permits.

Carbon Monoxide Hot Spots

The Project would expose existing and new sensitive receptors (students and residences) to cumulative DPM concentrations. With respects to pollutant concentrations and nearby roadways, the BAAQMD has established screening criteria for evaluating CO concentrations. According to BAAQMD's (2011a) CEQA Guidelines, a proposed project would result in a less-than-significant impact to localized CO concentrations if the following screening criteria are met.

1. The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Traffic generated by the Project would not have the potential to create CO hot spots at nearby roadways and intersections. Because the improvements at CSM were not great enough to generate substantial traffic volumes, no intersections were evaluated. Therefore, the screening criteria are met, no further analysis is warranted, and no CO hotspots are anticipated to result from the Project. This impact (exposure of sensitive receptors to CO hot spots) is less than significant, and no mitigation is required.

Impact CSM-AQE-6: Create objectionable odors affecting substantial number of people (less than significant)

Although offensive odors rarely cause any physical harm, they can be unpleasant and lead to considerable distress among the public. This distress may often generate citizen complaints to local governments and air districts. Any project with the potential to frequently expose the public to objectionable odors would be deemed as one having a significant impact.

According to ARB's (2005) *Air Quality and Land Use Handbook*, land uses associated with odor complaints typically include sewage treatment plants, landfills, recycling facilities, and manufacturing. Odor impacts on residential areas and other sensitive receptors, such as hospitals, daycare centers, schools, etc., warrant the closest scrutiny; but consideration should also be given to other land uses where people may congregate, such as recreational facilities, work sites, and commercial areas.

Potential odor source during construction activities include diesel exhaust from heavy-duty equipment and the use of architectural coatings and asphalt. Construction-related operations near existing receptors would be temporary in nature, and construction activities would not be likely to result in nuisance odors that would violate BAAQMD Regulation 7 (Odorous Substances).

Potential odor source during Project operations would include diesel exhaust from ongoing trash pick-up and the use of architectural coatings. However, odor impacts associated with the Project would be limited. Accordingly, operation of the Project is not expected to result in odor impacts that would exceed the BAAQMD's odor thresholds (**Table 3.2-8**). This impact would be less than significant. No mitigation is required.

Impact CSM-AQE-7: Lead to a wasteful, inefficient, and unnecessary usage of energy (less than significant)

Project construction would consume gasoline and diesel through operation of heavy-duty construction equipment and vehicles. Materials manufacturing would also consume energy, although information on the intensity and quantity of fuel used during manufacturing is currently unknown and beyond the scope of project-level environmental analyses. An analysis of energy associated with materials manufacturing is considered speculative and is not presented in this EIR. This analysis focuses on energy associated with physical construction of the Project (i.e., fuel consumed by heavy-duty equipment and vehicles).

Based on the GHG emissions analysis summarized in Section 3.6, *Greenhouse Gas Emissions*, and the rate of CO_2 emitted per gallon of fuel consumed, energy use associated with project construction was calculated and estimated to result in the one-time consumption of 385,126 million BTU. Concrete from demolished building materials will be recycled onsite for use in new Project building construction and will help reduce lifecycle energy associated with construction materials. Once operational, occupancy of the Project would generate vehicle trips from daily resident access from the proposed Skyline College residential complex. Project operations would also result in the consumption of electricity and natural gas for power and heating. Gasoline and diesel consumed by onroad vehicles, as well as electricity and natural gas consumed by the new buildings, represents the long-term operational energy impact associated with the project.

Energy consumed by operational onroad vehicles was quantified using the VMT estimate developed by the air quality analysis (**Appendix B**).

Operational energy consumption (expressed in terms of million BTU) at full buildout in 2027 is summarized in **Table 3.2-22**.

Table 3.2-22. Estimated Annual Operational Energy Consumption for the Project at the College of San Mateo

Condition	Million BTU/Year[1]	Million BTU/Year[2]
Onroad mobile sources	27,773	27,773
Electricity Consumption	4,543	-2.6
Natural Gas Consumption	9,320	5,595
Total Energy Consumption	41,636	33,365

[1] Does not include on-campus energy generation from proposed cogeneration plant and solar photovoltaic installation, or reduction in energy consumption from exceedance of Title 24 standards.

[2] Includes on-campus energy generation from proposed cogeneration plant and solar photovoltaic installation, and reduction in energy consumption from exceedance of Title 24 standards.

BTU = British thermal units

As shown in **Table 3.2-22**, long-term operation of the Project would result in a decrease in energy usage (onroad fuel consumption, electricity, and natural gas), relative to existing conditions of 38,725 million BTU per year when including on-campus renewable energy generation and a reduction in energy consumption. With respect to onroad vehicles, the Project would improve energy efficiency and fuel consumption because some students, faculty, and staff would be served by the new project residences at the Skyline College campus, as opposed to residences farther out in the community, reducing potential trip distances. This is consistent with the Energy Policy Act and AB 2076, both of which strive to reduce dependency on petroleum demand.

Many of these electricity and natural gas reductions are achieved by exceeding the CalGreen and Title 24 energy code requirements and following associated standards such as ASHRAE 90.1. All new building construction, except the residential complex at Skyline College, will target LEED Gold certification, and all new and modernization and renovation projects will exceed the California Building Code Title 24 2013 Energy Efficiency Standards by at least 15% or exceed 2010 ASHRAE Energy Standard for Low Rise Buildings 90.1 by 20%. The Project would also include renewable energy installations such as an 800,000 kWh per year photovoltaic installation, solar thermal systems, wind turbines, energy storage and a 250 kWh per year cogeneration system. Specifically, the Project could include the following sustainability strategies.

- Install LED lighting in the parking lot expansions, for reduced energy use in comparison to standard lighting.
- Recycle onsite concrete building materials and reincorporate the recycled materials into the work for demolition projects.
- Distribute any reclaimed non-potable water in purple piping for landscape irrigation.
- Capture and reuse condensate and waste water from pools or other water features for reuse.
- Install low-flow fixtures including lavatories, showers, kitchen sinks, urinals, and toilets.
- Target diversion of 75% of all solid waste from the landfill by recycling by 2020.
- Use local materials that are low in VOCs and/or contain high amounts or recycled content.
- Commit to net zero increase in storm water runoff and systems designed to effectively manage quantity of storm water flows while protecting local stream water quality.
- Implement advanced energy efficiency design approaches.

The District Board of Trustees has established sustainability goals and each campus has a Sustainability Plan which includes the college's visions, goals, and objectives for sustainability, as well as strategies to meet these goals. The proposed facility improvements at each of the campuses would be consistent with the visions, goals, and objectives in the respective Sustainability Plans.

Because the project is consistent with state and local energy policies, the project would not result in a wasteful, inefficient, and unnecessary usage of energy. This impact would be less than significant. No mitigation is required.

Skyline College

Impact SC-AQE-1: Conflict with or obstruct implementation of an applicable air quality plan (less than significant)

San Mateo County is currently designated a nonattainment area for federal ozone and PM2.5, standards, a maintenance area for the federal CO standard, and nonattainment for state ozone, PM10, and PM2.5 standards (**Table 3.2-3**). The most recent federal attainment plans are the 2001 Ozone Attainment Plan and the 1994 CO Redesignation Request and Maintenance Plan. The most recent state air quality plan is the 2010 Clean Air Plan, which provides an integrated strategy to control ozone, PM, TACs, and GHG emissions. The BAAQMD plans estimate future emissions in the SFBAAB and determine strategies necessary for emissions reductions through regulatory controls. Emissions projections are based on population, vehicle, and land use trends typically developed by the BAAQMD, MTC, and ABAG.

A project is deemed inconsistent with air quality plans if it would result in population and/or employment growth that exceeds estimates used to develop applicable air quality plans. Projects that propose development that is consistent with the growth anticipated by the relevant land use plans would be consistent with the current BAAQMD air quality plans. Likewise, projects that propose development that is less dense than anticipated within a general plan (or other governing land use document) would be consistent with the air quality plans because emissions would be less than estimated for the region. If a project proposes development that is greater than that anticipated growth projections, the project would be in conflict with the BAAQMD air quality plans, and might have a potentially significant impact on air quality because emissions would exceed those estimated for the region. This situation would warrant further analysis to determine if a proposed project and surrounding projects would exceed the growth projections used in the BAAQMD air quality plans for a specific subregional area.

The most relevant land use plan for the Skyline College campus is the City of San Bruno General Plan and related documents. The Project's inclusion of pedestrian oriented features and incentives would be consistent with City Policy (Policy T-A), as well as the Project's anticipated implementation of energy- and water-efficient building development and renovations (Policies PFS-C and PFS-J). Accordingly, the Project is considered consistent with growth projection in the most relevant land use plan.

The Project is consistent with the BAAQMD's 2010 CAP strategies and control measures, including TCM-D-2 (Pedestrian Access and Facilities Improvements) and ECM 2 (Renewable Energy). TCM-D-2 will improve pedestrian facilities and encourage walking by funding projects that improve pedestrian access to transit, employment and major activity centers. Improvements may include sidewalks/paths, benches, reduced street width, reduced intersection turning radii, crosswalks with activated signals, curb extensions/bulbs, buffers between sidewalks and traffic lanes, and street trees. ECM 2 promotes incorporation of renewable energy sources into new developments and

redevelopment projects. The Project also includes numerous energy conservation measures including, but not limited to all new building construction, except the residential complex, would target LEED Gold certification, and all new modernization and renovation projects would exceed the California Building Code Title 24 2013 Energy Efficiency Standards by at least 15%. Project measures would act to reduce Project-related area and mobile source emissions, relative to traditional community college uses. While emissions will be generated during construction and operation (discussed below), these emissions are neither expected to exceed BAAQMD significance thresholds nor impede attainment or maintenance of the NAAQS or CAAQS.

Because the Project would not conflict with any applicable land use plan or policy, is consistent with recent growth projections for the region, contributes to the City's long-term vision for sustainable growth, is consistent with measures in BAAQMD's 2010 CAP, and long-term Project emissions would not exceed BAAQMD's significance threshold, it would not conflict with or obstruct implementation of the current BAAQMD air quality plans. Therefore, the impact would be less than significant. No mitigation is required.

Impact SC-AQE-2: Violate a BAAQMD air quality standard or substantially contribute to an existing or projected air quality violation during Project construction (less than significant with mitigation)

Project construction has the potential to create air quality impacts through the use of heavy-duty construction equipment, construction worker vehicle trips, truck hauling trips, and offgassing from paving and coatings. In addition, fugitive dust emissions would result from demolition of existing structures, excavation, and grading. Mass criteria pollutant emissions generated by these sources were quantified using emission factors and methodologies within CalEEMod (version 2013.2.2), EMFAC 2011, road dust methodology from EPA, and information provided by the Project applicant.

Estimated construction emissions are summarized in **Table 3.2-23**. Maximum daily emissions for each year of construction are due to overlapping activities, based on the Project schedule and phasing information provided by the Project applicant. Detailed information on emissions modeling and quantification methods can be found in **Appendix B.**

As shown in **Table 3.2-23**, construction of the project would generate NO_X exhaust in excess of the BAAQMD's numeric thresholds during each year of construction from 2017–2020 without implementation of mitigation. **Mitigation Measures SC-AQE-1** through **SC-AQE-4** are required to reduce NO_X emissions to a less-than-significant level, with **Mitigation Measures SC-AQE-1** through **SC-AQE-3** reducing all emissions to below the BAAQMD's threshold except for the year 2019; to further reduce this impact to a less-than significant-level, **Mitigation Measure SC-AQE-4** is required.[5] Note the BAAQMD *CEQA Guidelines* consider dust impacts to be less than significant through the application of BAAQMD-recommended BMPs. Therefore, implementation of **Mitigation Measure SC-AQE-5** would reduce construction-related fugitive dust emissions to ensure fugitive dust impacts are less than significant.

[5] In the event **Mitigation Measures SC-AQE-1** through **SC-AQE-3** are not sufficient to reduce emissions below the BAAQMD's construction thresholds, **Mitigation Measure SC-AQE-4** would also ensure construction emissions are offset to below BAAQMD's thresholds to a less-than-significant level.

Table 3.2-23. Skyline College Daily Construction Emissions (pounds/day)

Unmitigated										
Year	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
2016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2017	7.5	64.1	46.9	0.1	6.0	3.8	9.7	3.1	3.5	6.6
2018	7.9	67.9	52.5	0.1	0.9	4.1	4.9	0.2	3.9	4.1
2019	12.0	111.1	85.6	0.1	1.8	6.2	8.0	0.4	5.8	6.2
2020	8.5	66.1	58.9	0.1	1.3	3.7	5.0	0.3	3.5	3.9
2021	4.4	36.6	30.4	0.1	0.6	2.0	2.6	0.2	1.9	2.0
2022	5.4	46.8	43.9	0.1	0.8	2.5	3.3	0.2	2.3	2.6
2023	1.4	14.1	10.2	0.0	0.1	0.9	1.1	0.0	0.9	0.9
2024	2.6	24.0	17.7	0.0	0.2	1.7	1.8	0.0	1.6	1.6
2025	1.3	12.7	8.4	0.0	0.1	0.9	0.9	0.0	0.8	0.8
2026	2.0	17.8	25.2	0.0	0.5	0.8	1.2	0.1	0.7	0.8
2027	0.9	7.5	12.5	0.0	0.2	0.3	0.5	0.1	0.3	0.4
Daily Maximum	**12.0**	**111.1**	**85.6**	**0.1**	**6.0**	**6.2**	**9.7**	**3.1**	**5.8**	**6.6**
BAAQMD Threshold	*54*	*54*	--	--	*BMPs*	*82*	--	*BMPs*	*54*	--
BAAQMD Threshold Exceeded?	*No*	*Yes*				*No*			*No*	

Mitigated										
Year	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
2016	0.0	0.0	0	0	0	0.0	0.0	0	0.0	0.0
2017	4.3	34.4	46.9	0.1	6	0.3	6.3	3.1	0.2	3.3
2018	4.5	36.5	52.5	0.1	0.9	0.3	1.2	0.2	0.3	0.5
2019	6.9	59.7[a]	85.6	0.1	1.8	0.4	2.2	0.4	0.4	0.8
2020	4.9	35.5	58.9	0.1	1.3	0.3	1.6	0.3	0.2	0.5
2021	2.5	19.7	30.4	0.1	0.6	0.1	0.7	0.2	0.1	0.3
2022	3.1	25.1	43.9	0.1	0.8	0.2	1.0	0.2	0.2	0.4
2023	0.8	7.6	10.2	0	0.1	0.1	0.2	0	0.1	0.1
2024	1.5	12.9	17.7	0	0.2	0.1	0.3	0	0.1	0.1
2025	0.7	6.8	8.4	0	0.1	0.1	0.2	0	0.1	0.1
2026	1.1	9.6	25.2	0	0.5	0.1	0.6	0.1	0.0	0.1
2027	0.5	4.0	12.5	0	0.2	0.0	0.2	0.1	0.0	0.1
Daily Maximum	**6.9**	**59.7[a]**	**85.6**	**0.1**	**6.0**	**0.4**	**6.3**	**3.1**	**0.4**	**3.3**
BAAQMD Threshold	*54*	*54*	--	--	*BMPs*	*82*	--	*BMPs*	*54*	--
BAAQMD Threshold Exceeded?	*No*	*Yes*[a]				*No*			*No*	

ROG = reactive organic gases
NO_x = nitrogen oxides
CO = carbon monoxide
SO_x = sulfur oxides
PM10 = particulate matter
PM2.5 = fine particulate matter

[a] Mitigated exhaust emissions include application of **Mitigation Measures SC-AQE-1** through **SC-AQE-5**and **SC-AQE-4**. Implementation of **Mitigation Measures SC-AQE-4** would be required to further reduce construction emissions to a less-than-significant level.

Mitigation Measure SC-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at Skyline College

This measure is the same as Mitigation Measure CC-AQE-1 described under Impact CC-AQE-2 but would be implemented at Skyline College.

Mitigation Measure SC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Skyline College

This measure is the same as Mitigation Measure CC-AQE-2 described under Impact CC-AQE-2 but would be implemented at Skyline College.

Mitigation Measure SC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Skyline College

This measure is the same as Mitigation Measure CC-AQE-3 described under Impact CC-AQE-2 but would be implemented at Skyline College.

Mitigation Measure SC-AQE-4: Offset NO_X Emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at Skyline College

This measure is the same as Mitigation Measure CC-AQE-4 described under Impact CC-AQE-2 but would be implemented at Skyline College.

Mitigation Measure SC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Skyline College

This measure is the same as Mitigation Measure CC-AQE-5 described under Impact CC-AQE-2 but would be implemented at Skyline College.

Impact SC-AQE-3: Violate a BAAQMD air quality standard or substantially contribute to an existing or projected air quality violation during Project operation (less than significant)

Long-term operational emissions associated with both existing and Project uses were quantified using the most recent version of CalEEMod (version 2013.2.2), operational information provided by the District, and traffic data provided by Hexagon Transportation Consultants (**Appendix E**). A thorough discussion of the methodology utilized herein is contained within Section 3.2.3.1, *Methodology*.

Estimated operational emissions from mobile sources associated with the new proposed residential complex are shown in **Table 3.2-24**. Emissions from the vehicle trips to Cañada College and CSM associated with Skyline College are split evenly between the two campuses, as trips would originate at Skyline College and end at Cañada College and CSM, respectively.

Estimated operational emissions for the existing buildings that would be demolished and replaced by proposed buildings associated with the Project are summarized in **Table 3.2-25**, as well as net operational emissions (Project – existing) associated with demolished and replaced buildings. Estimated operational emissions from area, energy, water, and waste sources, excluding mobile sources, from the new residential complex are included in the values presented in **Table 3.2-25**. The presentation of mobile source emissions separate from other operational source emissions is due to the assumption that total vehicle trips to Skyline College will not change as a result of Project

implementation, excepting the increase in vehicle trips from the residential complex. Only the new vehicle trips due to the residential complex are represented in **Table 3.2-24** while all other vehicle trips to the campus are represented in **Table 3.2-25** in the category titled *Mobile*. The difference in operational emissions between the Project and the existing uses represents the net impact of the Project, which is compared to BAAQMD thresholds. Operational emissions associated with the Project include emissions reductions from the proposed 200,000 kWh per year solar photovoltaic renewable energy installation, the proposed 250 kWh per year cogeneration system, and water use efficiency measures associated with the District's sustainability plan (Fullerton pers. comm.). Electricity and natural gas usage were conservatively assumed to remain constant (although the proposed buildings would be more energy efficient on a square footage basis than existing buildings, they would be larger). Estimated total operational emissions for the entire Skyline College campus are shown in **Table 3.2-26**.

Table 3.2-24. Skyline College Unmitigated Operational Mobile Source Emissions (tons/year)

Category	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Trips to Cañada College	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trips to CSM	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trips Offsite	0.2	0.4	2.1	<0.1	0.5	<0.1	0.5	0.1	<0.1	0.1
Trips Onsite	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total	**0.2**	**0.4**	**2.4**	**<0.1**	**0.5**	**<0.1**	**0.5**	**0.1**	**<0.1**	**0.1**
BAAQMD Threshold	*10*	*10*	*CAAQS*	--	*BMPs*	*15*	--	*BMPs*	*10*	--
BAAQMD Threshold Exceeded?	*No*	*No*				*No*			*No*	

ROG = reactive organic gases
NO_x = nitrogen oxides
CO = carbon monoxide
SO_x = sulfur oxides
PM10 = particulate matter
PM2.5 = fine particulate matter

Table 3.2-25. Skyline College Net Operational Emissions for Replaced Buildings (tons/year)

Category	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Existing buildings to be demolished										
Area	0.5	<0.1	<0.1	0	0	0	0	0	0	0
Energy	<0.1	0.3	0.2	<0.1	0	<0.1	<0.1	0	<0.1	<0.1
Mobile	1.6	3.3	17.4	<0.1	2.3	<0.1	2.4	0.6	<0.1	0.7
Total	**2.2**	**3.6**	**17.6**	**<0.1**	**2.3**	**0.1**	**2.4**	**0.6**	**0.1**	**0.7**
Proposed buildings to replace existing demolished buildings										
Area	1.1	<0.1	<0.1	0	0	<0.1	<0.1	0	<0.1	<0.1
Energy	<0.1	0.4	0.3	<0.1	0	<0.1	<0.1	0	<0.1	<0.1
Mobile	1.0	1.8	10.2	<0.1	2.3	<0.1	2.4	0.6	<0.1	0.7
Total	**2.2**	**2.2**	**10.5**	**<0.1**	**2.3**	**0.1**	**2.4**	**0.6**	**0.1**	**0.7**
Net Emissions (Proposed – Existing)	**<0.1**	**-1.4**	**-7.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
BAAQMD Threshold	*10*	*10*	*CAAQS*	*--*	*BMPs*	*15*	*--*	*BMPs*	*10*	*--*
BAAQMD Threshold Exceeded?	*No*	*No*				*No*			*No*	

ROG = reactive organic gases
NO_x = nitrogen oxides
CO = carbon monoxide
SO_x = sulfur oxides
PM10 = particulate matter
PM2.5 = fine particulate matter

Table 3.2-26. Skyline College Total Unmitigated Operational Emissions (tons/year)

Category	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Mobile Sources (Table 3.2-24)	0.2	0.4	2.4	<0.1	0.5	<0.1	0.5	0.1	<0.1	0.1
Net Demolished and Replaced Buildings (Table 3.2-25)	<0.1	-1.4	-7.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total	**0.3**	**-1.0**	**-4.7**	**<0.1**	**0.5**	**<0.1**	**0.5**	**0.1**	**<0.1**	**0.1**
BAAQMD Threshold	*10*	*10*	*CAAQS*	*--*	*BMPs*	*15*	*--*	*BMPs*	*10*	*--*
BAAQMD Threshold Exceeded?	*No*	*No*				*No*			*No*	

ROG = reactive organic gases
NOx = nitrogen oxides
CO = carbon monoxide
SOx = sulfur oxides
PM10 = particulate matter
PM2.5 = fine particulate matter

As shown in **Table 3.2-26**, operation of the Project is expected to result in small increases or even decreases in criteria pollutant emissions over existing conditions. However, net increases for all criteria pollutant emissions are below BAAQMD's significance thresholds. Therefore, the operational impact is considered less than significant. No mitigation is required.

Impact SC-AQE-4: Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment (less than significant with mitigation)

BAAQMD has identified project-level thresholds to evaluate criteria pollutant impacts (**Table 3.2-8**). In developing these thresholds, BAAQMD considered levels at which Project emissions would be cumulatively considerable. As noted in its CEQA Guidelines (2011a):

> In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is unnecessary.

The criteria pollutant thresholds presented in **Table 3.2-8** therefore represent the maximum emissions the Project may generate before contributing to a cumulative impact on regional air quality. Consequently, exceedances of the Project-level thresholds would be cumulatively considerable. As discussed in Impact SC-AQE-2, construction emissions associated with the Project are expected to not exceed BAAQMD's quantitative thresholds after implementation of mitigation. Therefore, with implementation of **Mitigation Measures SC-AQE-1** through **SC-AQE-5**, this impact would be less than significant.

Mitigation Measure SC-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at Skyline College

This measure is the same as Mitigation Measure CC-AQE-1 described under Impact CC-AQE-2 but would be implemented at Skyline College.

Mitigation Measure SC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Skyline College

This measure is the same as Mitigation Measure CC-AQE-2 described under Impact CC-AQE-2 but would be implemented at Skyline College.

Mitigation Measure SC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Skyline College

This measure is the same as Mitigation Measure CC-AQE-3 described under Impact CC-AQE-2 but would be implemented at Skyline College.

Mitigation Measure SC-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at Skyline College

This measure is the same as Mitigation Measure CC-AQE-4 described under Impact CC-AQE-2 but would be implemented at Skyline College.

Mitigation Measure SC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Skyline College

This measure is the same as Mitigation Measure CC-AQE-5 described under Impact CC-AQE-2 but would be implemented at Skyline College.

Impact SC-AQE-5: Expose existing sensitive receptors to substantial pollutant concentrations during construction (less than significant with mitigation)

This impact discussion addresses both construction-related health risks from DPM and PM.25 and carbon monoxide hot spots.

Construction-Related Health Risks from DPM and PM2.5 Emissions

Project construction would generate PM2.5 and DPM, resulting in the exposure of nearby existing sensitive receptors (e.g., residences) to increased PM2.5 concentrations and health risks associated with DPM. Exposure dissipates as a function of distance from the emissions source; thus, BAAQMD has determined that construction activities occurring at distances of greater than 1,000 feet from a sensitive receptor likely do not pose a significant health risk.

As shown in **Table 3.2-6**, several sensitive receptors are located within 1,000 feet of the campus. **Table 3.2-27** summarizes project-related DPM, PM2.5, and acute and chronic non-cancer risks (HI) associated with Project construction activities for the MEI. Estimated health risks in **Table 3.2-27** assume implementation of **Mitigation Measures SC-AQE-2, SC-AQE-3,** and **SC-AQE-5**.

Table 3.2-27 Project-Level Cancer, Non-Cancer (HI) and PM2.5 Concentrations during Construction at Skyline College

College	Increased Cancer Risk (per million)	Non-Cancer (HI)	Annual PM2.5 Concentration (µg/m3)
Onsite Residences	4.28	0.002	0.03
Offsite Residences	5.08	0.002	0.01
Offsite Park	0.03	0.000	0.00
Offsite Jail	0.01	0.000	0.00
BAAQMD Threshold	10	1.0	0.3
Exceed BAAQMD Threshold?	No	No	No

$\mu g/m^3$ = microgram per cubic meter

As shown in **Table 3.2-27**, construction of the Project would not result in cancer risks in excess of BAAQMD's thresholds. This is a less than significant impact.

There are multiple stationary sources within 1,000 feet of the campus that generate DPM and PM2.5. These emissions contribute to elevated background concentrations of DPM and PM2.5, which when combined with emissions from Project construction, could contribute to a cumulative health risk. Accordingly, consistent with BAAQMD's CEQA Guidelines, cumulative exposure to DPM and PM2.5 was evaluated by adding background health risks to the estimated construction health risks for the Project (**Table 3.2-27**).

The results of the cumulative impact assessment are presented in **Table 3.2-28**, which summarizes individual health risk contributions of sources within 1,000 feet, as well as estimated construction health risks at the MEI for the Project. Estimated health risks in **Table 3.2-28** assume implementation of **Mitigation Measures SC-AQE-2, SC-AQE-3,** and **SC-AQE-5**.

Table 3.2-28 Cumulative Cancer, Chronic (HI), and PM2.5 Health Risks during Project Construction at Skyline College

Source ID/Name	Increased Cancer Risk (per million)	Non-Cancer Hazard Index	PM2.5 Exposure (ug/m^3)
Contribution from Ambient Sources			
Source # 15348	1.30	0.009	0.57
SR 35	0.23	0.000	0.00
Contribution from Project Construction			
Onsite Residences	4.28	0.002	0.03
Offsite Residences	5.08	0.002	0.01
Offsite Park	0.02	0.000	0.00
Offsite Jail	0.01	0.000	0.00
Cumulative Risk			
Onsite Residences	5.81	0.011	0.60
Offsite Residences	6.61	0.011	0.59
Offsite Park	1.55	0.009	0.57
Offsite Jail	1.54	0.009	0.57
BAAQMD Thresholds	100	10.0	0.8
Exceed BAAQMD Threshold?	No	No	No
$\mu g/m^3$ = microgram per cubic meter			

As shown in **Table 3.2-28**, construction of the Project would not result in PM2.5 concentrations or cancer and non-cancer risks in excess of BAAQMD's cumulative thresholds with implementation of **Mitigation Measures SC-AQE-2, SC-AQE-3,** and **SC-AQE-5**. Consequently, this impact (exposure of sensitive receptors to construction-related health risks from DPM and PM2.5) would be less than significant.

Mitigation Measure SC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Skyline College

This measure is the same as Mitigation Measure CC-AQE-2 described under Impact CC-AQE-2 but would be implemented at Skyline College.

Mitigation Measure SC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Skyline College

This measure is the same as Mitigation Measure CC-AQE-3 described under Impact CC-AQE-5 but would be implemented at Skyline College.

Mitigation Measure SC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Skyline College

This measure is the same as Mitigation Measure CC-AQE-5 described under Impact CC-AQE-2 but would be implemented at Skyline College.

Carbon Monoxide Hot Spots

The Project would expose existing and new sensitive receptors (students and residences) to cumulative DPM concentrations. With respects to pollutant concentrations are nearby roadways, the BAAQMD has established screening criteria for evaluating CO concentrations. According to BAAQMD's (2011a) CEQA Guidelines, a proposed project would result in a less-than-significant impact to localized CO concentrations if the following screening criteria are met.

1. The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Traffic generated by the Project would not have the potential to create CO hot spots at nearby roadways and intersections. Based on traffic data provided by the project engineers, the maximum peak hour traffic volumes at nearby intersections affected by the project are estimated at 3,584 for Skyline Boulevard and College Drive. This volume is far below the BAAQMD's screening criteria of 24,000 and 44,000 vehicles per hour. Therefore, the screening criteria are met, no further analysis is warranted, and no CO hot spots are anticipated to result from the Project. This impact (exposure of sensitive receptors to carbon monoxide hot spots) would be less than significant.

Impact SC-AQE-6: Create objectionable odors affecting substantial number of people (less than significant)

Although offensive odors rarely cause any physical harm, they can be unpleasant and lead to considerable distress among the public. This distress may often generate citizen complaints to local governments and air districts. Any project with the potential to frequently expose the public to objectionable odors would be deemed as one having a significant impact.

According to ARB's (2005) *Air Quality and Land Use Handbook*, land uses associated with odor complaints typically include sewage treatment plants, landfills, recycling facilities, and manufacturing. Odor impacts on residential areas and other sensitive receptors, such as hospitals, daycare centers, schools, etc., warrant the closest scrutiny; but consideration should also be given to other land uses where people may congregate, such as recreational facilities, work sites, and commercial areas.

Potential odor source during construction activities include diesel exhaust from heavy-duty equipment and the use of architectural coatings and asphalt. Construction-related operations near existing receptors would be temporary in nature, and construction activities would not be likely to result in nuisance odors that would violate BAAQMD Regulation 7 (Odorous Substances).

Potential odor source during Project operations would include diesel exhaust from ongoing trash pick-up and the use of architectural coatings. However, odor impacts associated with the Project would be limited. Accordingly, operation of the Project is not expected to result in odor impacts that would exceed the BAAQMD's odor thresholds (**Table 3.2-8**). This impact would be less than significant. No mitigation is required.

Impact SC-AQE-7: Lead to a wasteful, inefficient, and unnecessary usage of energy (less than significant)

Project construction would consume gasoline and diesel through operation of heavy-duty construction equipment and vehicles. Materials manufacturing would also consume energy, although information on the intensity and quantity of fuel used during manufacturing is currently unknown and beyond the scope of project-level environmental analyses. An analysis of energy associated with materials manufacturing is considered speculative and is not presented in this EIR. This analysis focuses on energy associated with physical construction of the Project (i.e., fuel consumed by heavy-duty equipment and vehicles).

Based on the GHG emissions analysis summarized in Section 3.6, *Greenhouse Gas Emissions*, and the rate of CO_2 emitted per gallon of fuel consumed, energy use associated with Project construction was calculated and estimated to result in the one-time consumption of 292,953 million BTU. Concrete from demolished building materials will be recycled onsite for use in new Project building construction and will help reduce lifecycle energy associated with construction materials. Once operational, occupancy of the project would generate vehicle trips from daily resident access, public visitation, waste management trucks, and employee travel. Project operations would also result in the consumption of electricity and natural gas for power, heating, and cooking. Gasoline and diesel consumed by onroad vehicles, as well as electricity and natural gas consumed by residents, represents the long-term operational energy impact associated with the Project.

Energy consumed by operational onroad vehicles was quantified using the VMT estimate (see **Appendix B**).

Operational energy consumption (expressed in terms of million BTU) at full buildout in 2027 is summarized in **Table 3.2-29**.

Table 3.2-29. Estimated Annual Operational Energy Consumption for the Project at Skyline College

Condition	Million BTU/Year[1]	Million BTU/Year[2]
Onroad mobile sources	36,020	36,020
Electricity Consumption	7,950	4,428
Natural Gas Consumption	12,927	7,756
Total Energy Consumption	56,897	48,204

[1] Does not include on-campus energy generation from proposed cogeneration plant and solar photovoltaic installation, or reduction in energy consumption from exceedance of Title 24 standards.

[2] Includes on-campus energy generation from proposed cogeneration plant and solar photovoltaic installation, and reduction in energy consumption from exceedance of Title 24 standards.

BTU = British thermal units

As shown in **Table 3.2-29**, long-term operation of the Project would result in an increase in energy usage (onroad fuel consumption, electricity, and natural gas), relative to existing conditions of 39,269 million BTU per year. With respect to onroad vehicles, the Project would improve energy

efficiency and fuel consumption students would be served by the new project residences at the Skyline College campus, as opposed to residences farther out in the community, reducing potential trip distances. This is consistent with the Energy Policy Act and AB 2076, both of which strive to reduce dependency on petroleum demand.

Many of these electricity and natural gas reductions are achieved by exceeding the CalGreen and Title 24 energy code requirements and following associated standards such as ASHRAE 90.1. It is anticipated that all new building construction, except the residential complex at Skyline College, would be LEED Gold certified, and all new and modernization and renovation projects would exceed the California Building Code Title 24 2013 Energy Efficiency Standards by at least 15% or exceed 2010 ASHRAE Energy Standard for Low Rise Buildings 90.1 by 20%. The Project would also include renewable energy installations such as an 200,000 kWh per year photovoltaic installation, solar thermal systems, wind turbines, energy storage and a 250 kWh per year cogeneration system. Specifically, the Project could include the following sustainability strategies.

- Install LED lighting in the parking lot expansions, for reduced energy use in comparison to standard lighting.
- Recycle onsite concrete building materials and reincorporate the recycled materials into the work for demolition projects.
- Distribute any reclaimed non-potable water in purple piping for landscape irrigation.
- Capture and reuse condensate and waste water from pools or other water features for reuse.
- Install low-flow fixtures including lavatories, showers, kitchen sinks, urinals, and toilets.
- Target diversion of 75% of all solid waste from the landfill by recycling by 2020.
- Use local materials that are low in VOCs and/or contain high amounts or recycled content.
- Commit to net zero increase in storm water runoff and systems designed to effectively manage quantity of storm water flows while protecting local stream water quality.
- Implement advanced energy efficiency design approaches.

The District Board of Trustees has established sustainability goals and each campus has a Sustainability Plan which includes the college's visions, goals, and objectives for sustainability, as well as strategies to meet these goals. The proposed facility improvements at each of the campuses would be consistent with the visions, goals, and objectives in the respective Sustainability Plans.

Because the Project is consistent with state and local energy policies, the Project would not result in a wasteful, inefficient, and unnecessary usage of energy. This impact would be less than significant. No mitigation is required.

3.2.3.4 Cumulative Impacts

BAAQMD has identified project-level thresholds to evaluate criteria pollutant impacts (**Table 3.2-8**). In developing these thresholds, BAAQMD considered levels at which project emissions would be cumulatively considerable. As noted in its CEQA Guidelines (2011a):

> In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is unnecessary.

BAAQMD's criteria air pollutant thresholds, therefore, represent the maximum emissions the entirety of Project (i.e., the combined emissions of Cañada College, CSM, and Skyline College) may generate before contributing to a cumulative impact on local air quality. Therefore, exceedances of BAAQMD's mass emissions thresholds for ROG, NOx, PM10 exhaust, and PM2.5 exhaust would be cumulatively considerable for the entire project consisting of all three campuses.

Project Construction

Project construction has the potential to create air quality impacts through the use of heavy-duty construction equipment, construction worker vehicle trips, truck hauling trips, and offgassing from paving and coatings. In addition, fugitive dust emissions would result from demolition of existing structures, excavation, and grading. Mass criteria pollutant emissions generated by these sources were quantified using emission factors and methodologies within CalEEMod (version 2013.2.2), EMFAC 2011, road dust methodology from the EPA, and information provided by the Project applicant.

Estimated construction emissions are summarized in **Table 3.2-30**. Maximum daily emissions for each year of construction are due to overlapping activities of construction phases occurring simultaneously on multiple campuses, based on the Project schedule and phasing information provided by the Project applicant. Monthly values of maximum daily criteria air pollutant emissions from all campuses were summed and are reflected in **Table 3.2-30** as the largest monthly emissions value from each year of total construction activities.

Table 3.2-30. San Mateo County Community College District Total Daily Construction Emissions (pounds/day)

	Unmitigated									
Year	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
2016	12.9	132.9	99.8	0.1	19.1	7.2	26.4	10.2	6.7	16.9
2017	22.9	202.7	144.5	0.2	20.3	12.0	30.9	10.5	11.2	20.3
2018	24.7	208.7	156.0	0.2	2.7	12.8	15.4	0.7	12.0	12.7
2019	29.8	266.5	204.1	0.3	3.7	15.8	19.5	0.9	14.8	15.7
2020	17.9	151.0	116.0	0.2	1.9	9.2	11.1	0.5	8.6	9.1
2021	12.3	103.8	96.2	0.2	1.6	5.6	7.2	0.4	5.2	5.6
2022	10.7	94.8	79.2	0.1	1.1	5.8	6.9	0.3	5.5	5.8
2023	4.0	39.5	27.0	0.0	0.3	2.6	2.9	0.1	2.4	2.5
2024	3.7	32.2	30.3	0.0	0.4	2.1	2.4	0.1	1.9	2.0
2025	1.3	12.7	8.4	0.0	0.1	0.9	0.9	0.0	0.8	0.8
2026	2.0	17.8	25.2	0.0	0.5	0.8	1.2	0.1	0.7	0.8
2027	0.9	7.5	12.5	0.0	0.2	0.3	0.5	0.1	0.3	0.4
Daily Maximum	**29.8**	**266.5**	**204.1**	**0.3**	**20.3**	**15.8**	**30.9**	**10.5**	**14.8**	**20.3**
BAAQMD Threshold	*54*	*54*	--	--	*BMPs*	*82*	--	*BMPs*	*54*	--
BAAQMD Threshold Exceeded?	*No*	*Yes*				*No*			*No*	

Mitigated										
Year	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
2016	7.4	71.4	99.8	0.1	19.1	0.5	19.6	10.2	0.5	10.7
2017	13.1	108.9[a]	144.5	0.2	20.3	0.8	21.1	10.5	0.8	11.3
2018	14.1	112.1[a]	156	0.2	2.7	0.9	3.6	0.7	0.8	1.5
2019	17.0	143.1[a]	204.1	0.3	3.7	1.1	4.8	0.9	1.0	1.9
2020	10.2	81.7 [a]	116	0.2	1.9	0.6	2.5	0.5	0.6	1.1
2021	7.0	55.7[a]	96.2	0.2	1.6	0.4	2.0	0.4	0.4	0.8
2022	6.1	50.9	79.2	0.1	1.1	0.4	1.5	0.3	0.4	0.7
2023	2.3	21.2	27	0	0.3	0.2	0.5	0.1	0.2	0.3
2024	2.1	17.3	30.3	0	0.4	0.1	0.5	0.1	0.1	0.2
2025	0.7	6.8	8.4	0	0.1	0.1	0.2	0	0.1	0.1
2026	1.1	9.6	25.2	0	0.5	0.1	0.6	0.1	0.0	0.1
2027	0.5	4.0	12.5	0	0.2	0.0	0.2	0.1	0.0	0.1
Daily Maximum	**17.0**	**143.1[a]**	**204.1**	**0.3**	**20.3**	**1.1**	**21.1**	**10.5**	**1.0**	**11.3**
BAAQMD Threshold	*54*	*54*	*--*	*--*	*BMPs*	*82*	*--*	*BMPs*	*54*	*--*
BAAQMD Threshold Exceeded?	*No*	*Yes*				*No*			*No*	

ROG = reactive organic gases
NO_x = nitrogen oxides
CO = carbon monoxide
SO_x = sulfur oxides
PM10 = particulate matter
PM2.5 = fine particulate matter

[a] Mitigated exhaust emissions include application of **Mitigation Measures CC-AQE-1** through **CC-AQE-5**and **CC-AQE-4** Implementation of **Mitigation Measures CC-AQE-4** would be required to further reduce construction emissions to a less-than-significant level.

As shown in **Table 3.2-30**, construction of the Project would generate NO_X exhaust in excess of the BAAQMD's numeric thresholds during each year of construction from 2016–2022 without implementation of mitigation. Mitigation measures as previously described in the Impact Analysis for each campus are required to reduce NO_X emissions and construction-related fugitive dust emissions to a less-than-significant level.

Project Operation

Long-term operational emissions associated with both existing and Project uses were quantified using the most recent version of CalEEMod (version 2013.2.2), operational information provided by the District, and traffic data provided by Hexagon Transportation Consultants (**Appendix E**). A thorough discussion of the methodology utilized herein is contained within Section 3.2.3.1, *Methodology*.

Operation of the Project is expected to individually result in small increases or even decreases in criteria pollutant emissions over existing conditions. However, cumulative net increases for all criteria pollutant emissions are below BAAQMD's significance thresholds. In addition, **Table 3.2-31** indicates combined operational emissions are below BAAQMD's thresholds. Therefore, the operational impact is considered less than significant. No mitigation is required.

Table 3.2-31. San Mateo County Community College District Total Unmitigated Operational Emissions (tons/year)

Campus	ROG	NO_X	CO	SO_X	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Cañada	0.7	0.6	2.9	<0.1	0.5	<0.1	0.5	0.1	<0.1	0.2
San Mateo	-0.4	-1.4	-6.8	<0.1	<0.1	<0.1	<0.1	0	<0.1	<0.1
Skyline	0.3	-1.0	-4.7	<0.1	0.5	<0.1	0.5	0.1	<0.1	0.1
Total	**0.6**	**-1.8**	**-8.6**	**<0.1**	**1.0**	**<0.1**	**1.0**	**0.2**	**<0.1**	**0.3**
BAAQMD Threshold	*10*	*10*	*CAAQS*	--	*BMPs*	*15*	--	*BMPs*	*10*	--
BAAQMD Threshold Exceeded?	*No*	*No*				*No*			*No*	

ROG = reactive organic gases
NOx = nitrogen oxides
CO = carbon monoxide
SOx = sulfur oxides
PM10 = particulate matter
PM2.5 = fine particulate matter

As shown in **Table 3.2-32**, operation of the Project is expected to result in a cumulative energy consumption of approximately 106 million BTU per year after including on-campus renewable energy generation and a reduction in energy consumption from exceeding Title 24 standards. This is an increase in energy usage (onroad fuel consumption, electricity, and natural gas), relative to existing conditions of approximately 93 million BTU per year.

Because the Project is consistent with state and local energy policies, the Project would not result in a wasteful, inefficient, and unnecessary usage of energy. This impact would be less than significant. No mitigation is required.

Table 3.2-32. San Mateo County Community College District Total Operational Energy Consumption

Condition	Million BTU/Year[1]	Million BTU/Year[2]
Cañada College	28,374	24,221
College of San Mateo	41,636	33,365
Skyline College	56,897	48,204
Total Energy Consumption	126,907	105,790

[1] Does not include on-campus energy generation from proposed cogeneration plants and solar photovoltaic installations, or reduction in energy consumption from exceedance of Title 24 standards.
[2] Includes on-campus energy generation from proposed cogeneration plants and solar photovoltaic installations, and reduction in energy consumption from exceedance of Title 24 standards.
BTU = British thermal units

3.3 Biological Resources

This section describes the regulatory and environmental setting for biological resources. It also describes impacts on biological resources that would result from implementation of the Project and mitigation for significant impacts where feasible and appropriate.

3.3.1 Regulatory Setting

The following federal, state, and local regulations are relevant to biological resources and apply to implementation of the Project on all three campuses unless otherwise specified.

3.3.1.1 Federal

Endangered Species Act (Sections 7 and 9)

The federal Endangered Species Act (ESA) (42 United States Code [U.S.C.] 4321 et seq.) and subsequent amendments provide guidance for conserving federally listed species and the ecosystems upon which they depend. ESA is administered by the U.S. Fish and Wildlife Service (USFWS) for terrestrial and freshwater fish species and by the National Marine Fisheries Service (NMFS) for marine and anadromous species. Species can be listed as either endangered or threatened. An endangered species is at risk of extinction throughout all or a significant portion of its range (ESA Section 3[6]). A threatened species is likely to become endangered within the foreseeable future (ESA Section 3[19]).

Section 9 of ESA prohibits the take of any fish or wildlife species listed under ESA as endangered or threatened. *Take*, as defined by ESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." *Harm* is defined as "any act that kills or injures the species, including 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).

Section 9 prohibits the "removal or reduction to possession" of any listed plant species "under federal jurisdiction" (i.e., on federal land, where federal funding is provided, or where federal authorization is required). ESA includes mechanisms that provide exceptions to the Section 9 take prohibitions. These are addressed in Section 7 for federal actions and Section 10 for nonfederal actions.

Section 7 (Interagency Consultation and Biological Assessments) requires federal agencies to consult with the USFWS or NMFS, as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat. Section 10 applies to non-federal actions and allows activities that would potentially take a listed species to proceed only upon issuance of an incidental take permit and associated habitat conservation plan.

Migratory Bird Treaty Act and Executive Order 13186

The Migratory Bird Treaty Act (16 U.S.C. 702–712) (MBTA) protects selected species of birds that cross international boundaries (i.e., species that occur in more than one country at some point during their annual life cycle). The law applies to the removal of active nests, eggs, and feathers.

Executive Order 13186 directs each federal agency taking actions that have or may have adverse impacts on migratory bird populations to work with USFWS to develop a memorandum of understanding that will promote the conservation of migratory bird populations.

Federal Clean Water Act

Refer to Section 3.8, *Hydrology and Water Quality*, for a description of the federal Clean Water Act (CWA). As noted, CWA Sections 404 and 401 apply to wetlands and are not discussed further because there are no wetlands on any of the campuses.

Executive Order 13112 (Invasive Species)

Executive Order 13112, Invasive Species, is intended to prevent the introduction of invasive plant and animal species and control their potential to spread. This order prohibits the federal government from authorizing or funding actions that may cause or promote the introduction and/or spread of invasive species unless the agency has determined that the action's benefits clearly outweigh potential harm caused by invasive species; and that all feasible and prudent measures will be taken to minimize risk of harm.

3.3.1.2 State

California Endangered Species Act

The California Endangered Species Act (CESA) mandates that state agencies not approve a project that would jeopardize the continued existence of listed or candidate species if reasonable and prudent alternatives are available that would avoid a jeopardy finding. The California Department of Fish and Wildlife (CDFW) may allow the limited take of such species upon issuance of an incidental take permit under Section 2081. *Take* is defined under the California Fish and Game Code (more narrowly than under ESA) as any action or attempt to "hunt, pursue, catch, capture, or kill." Therefore, take under CESA does not include "the taking of habitat alone or the impacts of the taking."[1] Rather, the courts have affirmed that under CESA, "taking involves mortality."

California Fish and Game Code

Section 1600 et seq. (Lake and Streambed Alteration)

Section 1600 et seq. requires notifying CDFW prior to any project activity undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. CDFW will issue a Lake and Streambed Alteration Agreement that conditionally allows work within the bed and bank of the lake or stream.

[1] *Environmental Council of Sacramento v. City of Sacramento*, 142 Cal. App. 4th 1018 (2006).

Section 3503 (Bird Nests and Birds of Prey)

Section 3503 states that it is "unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the code or any regulation made pursuant thereto." Section 3503.5 specifically addresses birds in the orders Falconiformes (hawks, eagles, and falcons) and Strigiformes (owls), collectively referred to as "birds-of-prey." Under this subsection, both the nests and individual birds-of-prey may not be taken, possessed, or destroyed at any time.

Sections 3511, 4700, 5050, and 5515 (Fully Protected Species)

Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) identify 37 fully protected species that may not be taken or possessed at any time, and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of bird species for the protection of livestock, or as part of an approved natural community conservation plan. The fully protected classification was the state's initial effort in the 1960s to identify and provide additional protection to those animals that were rare or faced possible extinction. Most fully protected species have also been listed as threatened or endangered under the more recent endangered species laws.

California Native Plant Protection Act

The California Native Plant Protection Act (Sections 1900–1913) requires all state agencies to use their authority to carry out programs to conserve endangered and rare native plants. It gives CDFW the power to designate native plants as endangered or rare and to protect endangered and rare plants from take.

Porter-Cologne Act

Refer to Section 3.8, *Hydrology and Water Quality*, for a description of the Porter-Cologne Act.

3.3.1.3 Local

As stated in Section 2.6 of Chapter 2, *Project Description*, the District is exempt from the application of city and county zoning ordinances, except the proposed residential complex at Skyline College because it is a non-educational use. However, the current relevant zoning ordinances for each campus are discussed in this section for informational purposes. There are no applicable general plan policies.

Redwood City Municipal Code

Street Trees

Article VI of the Redwood City Municipal Code establishes rules and regulations relating to the planting, care, and maintenance of street trees; outlines a comprehensive plan for the planting and maintenance of street trees; mandates that the Park Superintendent be responsible for the administration of this article; prohibits the removal, alteration, or replacement of street trees without a permit; and outlines the Master Tree List to be implemented by the Park Superintendent.

Tree Preservation

Chapter 35 of the Redwood City Municipal Code outlines the height and width requirements for a heritage tree; allows the designation by the Park and Recreation Commission of a heritage tree regardless of size if it has historical significance, is indigenous to the area, or is part of a group of trees that is dependent on each other for survival; prohibits the removal of any tree without a permit from the Parks and Recreation Director; and mandates the restoration and/or replacement of a damaged tree that has not been approved for removal.

Town of Woodside Municipal Code

Tree Preservation

Chapter 153, Subchapter 21 of the Woodside Municipal Code outlines the height and width requirements for a Significant Tree by species, prohibits the removal of a qualified Significant Tree without a permit from the Planning Director, requires the replacement of Significant Trees as determined by the Planning Director, and mandates the payment of a fine for the removal of a Significant Tree that has not been approved for removal.

City of San Mateo Municipal Code

Street Trees

Chapter 13.35 of the San Mateo Municipal Code prohibits the planting, pruning, and removal of street trees without a notice and a permit; outlines the permit application; and mandates the replacement of removed or damaged trees. Street trees are defined as "trees planted in the public right-of-way."

Heritage Trees

Chapter 13.52 of the San Mateo Municipal Code attempts to protect and preserve heritage trees for aesthetic and biological values; requires property owners to maintain and preserve all heritage trees; prohibits the removal or pruning of heritage trees without a permit from the Director; and outlines reforestation and replanting guidelines.

The municipal code provides the following definition of "heritage trees."

- Any cedar (*Cedrus* spp.), bay, buckeye, oak, or redwood tree that has a diameter of 10 inches or more measured at 48 inches above natural grade.
- Any tree or stand of trees designated by resolution of the City Council to be of special historical value or of significant community benefit.
- A stand of trees, the nature of which makes each dependent on the others for survival.
- Any other tree with a trunk diameter of 16 inches or more, measured at 48 inches above natural grade.

City of San Bruno Municipal Code

Heritage Trees

Chapter 8.25 of the San Bruno Municipal Code provides the definition of a heritage tree; prohibits the removal of any heritage tree from any property without a permit; outlines the process for applying for a removal permit; and mandates that permit for removal contains replanting and reforestation condition. The municipal code provides the following definitions of "heritage tree."

- Any native bay (*Umbellularia californica*), buckeye (*Aesculus californica*), oak (*Quercus* spp.), redwood (*Sequoia sempervirens*), or pine (*Pinus radiata*) tree that has a diameter of 6 inches or more measured at 54 inches above natural grade.
- Any tree or stand of trees designated by resolution of the city council to be of special historical value or of significant community benefit.
- A stand of trees, the nature of which makes each dependent on the others for survival.
- Any other tree with a trunk diameter of 10 inches or more, measured at 54 inches above natural grade.

Tree replacement is required when heritage trees are removed. The minimum replacement ratio is either two 24-inch box size trees, or one 36-inch box size tree, for each heritage tree removed. The penalty for removal of a heritage tree without a valid permit is replacement at double the usual ratio.

3.3.2 Environmental Setting

ICF biologists conducted reconnaissance-level surveys at Cañada College and the College of San Mateo (CSM) on April 20, 2015, and at Skyline College on April 22, 2015. During the reconnaissance-level surveys, land cover types occurring within the Project area (within or adjacent to the footprints of the facility improvements) were characterized based on plant composition and distribution. Land cover types observed within the Project area include landscaped/disturbed, coast live oak woodland, purple needle grass grassland, Monterey cypress stands, Monterey pine forest, coastal sage scrub, and nonnative annual grassland (**Figures 3.3-1a** through **3.3-1c**). These land cover types were evaluated for their potential to support special-status plant and animal species. **Table 3.3-1** identifies the wildlife species observed during the April 2015 reconnaissance surveys and other common species that are likely to occur on the campuses, based on habitat type and quality. **Table 3.3-1** applies to all three campuses unless otherwise specified (e.g., "present" indicates that species was observed on all three campuses).

Table 3.3-1. Wildlife Species Observed or Likely to Occur in the Project Area

Species	Project Area Habitat Association(s)	Protection Status	Likelihood of Occurrence
Invertebrates			
Mission blue butterfly *Icaricia icarioides missionensis*	coastal sage scrub, Monterey pine forest (Skyline College only)	federally endangered	high at Skyline College (host plants present at western edge); none at CSM and Cañada College.
Field crescent butterfly *Phyciodes pulchella*	All	none	present
Acmon blue butterfly *Plebejus acmon*	All	none	present
Amphibians			
Arboreal salamander *Aneides lugubris*	coast live oak woodland, Monterey cypress stand, Monterey pine forest	none	moderate
Pacific treefrog *Pseudacris regilla*	all	none	high
Reptiles			
Western fence lizard *Sceloporus occidentalis*	all	none	present
California kingsnake *Lampropeltis californiae*	nonnative annual grassland, purple needle grass grassland	none	present
Western yellow-bellied racer *Coluber constrictor mormon*	nonnative annual grassland, purple needle grass grassland	none	moderate
Common gartersnake *Thamnophis sirtalis*	all	none	moderate
Birds			
Turkey vulture *Cathartes aura*	nonnative annual grassland, coastal sage scrub, Monterey cypress stand, Monterey pine forest	none, nests protected by MBTA and California Fish and Game Code	present
White-tailed kite *Elanus leucurus*	nonnative annual grassland, coast live oak woodland, Monterey cypress stand, Monterey pine forest, northern coastal scrub	none, nests protected by MBTA and California Fish and Game Code	moderate

Species	Project Area Habitat Association(s)	Protection Status	Likelihood of Occurrence
Red-tailed hawk *Buteo jamaicensis*	nonnative annual grassland, Monterey cypress stand, Monterey pine forest	none, nests protected by MBTA and California Fish and Game Code	present
Mourning dove *Zenaida macroura*	landscaped/disturbed, coast live oak woodland, Monterey cypress stand, Monterey pine forest, northern coastal scrub	none, nests protected by MBTA and California Fish and Game Code	present
American crow *Corvus brachyrhynchos*	all	none, nests protected by MBTA and California Fish and Game Code	present
Western scrub-jay *Aphelocoma californica*	all	none, nests protected by MBTA and California Fish and Game Code	present
Dark-eyed junco *Junco hyemalis*	landscaped/disturbed, coast live oak woodland, Monterey cypress stand, Monterey pine forest	none, nests protected by MBTA and California Fish and Game Code	present
Chestnut-backed chickadee *Poecile rufescens*	landscaped/disturbed, coast live oak woodland, Monterey cypress stand, Monterey pine forest	none, nests protected by MBTA and California Fish and Game Code	present
Northern mockingbird *Mimus polyglottos*	landscaped/disturbed, coast live oak woodland, Monterey cypress stand, Monterey pine forest	none, nests protected by MBTA and California Fish and Game Code	present
California towhee *Melozone crissalis*	landscaped/disturbed, coast live oak woodland, Monterey cypress stand, Monterey pine forest, northern coastal scrub	none, nests protected by MBTA and California Fish and Game Code	high
White-crowned sparrow *Zonotrichia leucophrys*	landscaped/disturbed, Monterey cypress stand, Monterey pine forest, northern coastal scrub, coastal sage scrub	none, nests protected by MBTA and California Fish and Game Code	moderate
Brewer's blackbird *Euphagus cyanocephalus*	landscaped/disturbed, Monterey cypress stand, Monterey pine forest	none, nests protected by MBTA and California Fish and Game Code	moderate

Species	Project Area Habitat Association(s)	Protection Status	Likelihood of Occurrence
House finch *Haemorhous mexicanus*	all	none, nests protected by MBTA and California Fish and Game Code	high
Mammals			
Brazilian free-tailed bat *Tadarida brasiliensis*	nonnative annual grassland (foraging)	none, roost sites considered sensitive resource by CDFW	high for foraging, none for roosting due to ongoing human activity
Big brown bat *Eptesicus fuscus*	nonnative annual grassland (foraging)	none, roost sites considered sensitive resource by CDFW	high for foraging, none for roosting due to ongoing human activity
Striped skunk *Mephitis mephitis*	all	none	high
Mule deer *Odocoileus hemionus*	all	none	high
Botta's pocket gopher *Thomomys bottae*	nonnative annual grassland	none	present (observed burrows)
House mouse *Mus musculus*	all	none (nonnative)	high
Norway rat *Rattus norvegicus*	all	none (nonnative)	high
California ground squirrel *Otospermophilus beeccheyi*	nonnative annual grassland	none	present
Western gray squirrel *Sciurus griseus*	coast live oak woodland	none	present

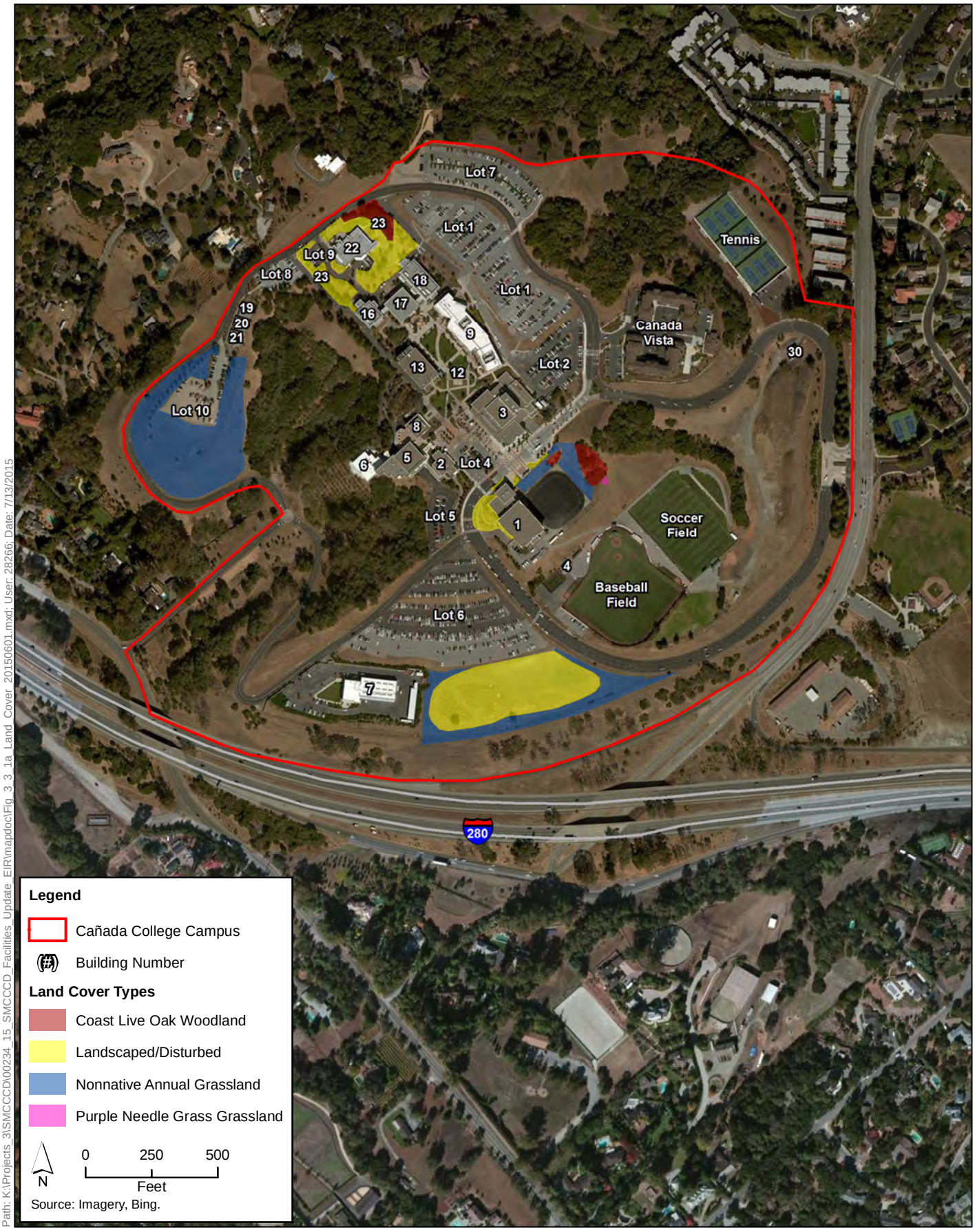
MBTA = Migratory Bird Treaty Act
CDFW = California Department of Fish and Wildlife

3.3.2.1 Cañada College

Land cover types identified within the Cañada College Project area include landscaped/disturbed, coast live oak woodland, purple needle grass grassland, and nonnative annual grassland. No wetlands or riparian communities were observed. Vegetation and wildlife habitat values of each cover type are briefly discussed below. Refer to **Figure 3.3-1a** for their locations.

Landscaped/Disturbed

The landscaped/disturbed land cover type occurs in and adjacent to the majority of the existing buildings and facilities. The landscaped/disturbed land cover type encompasses human development and highly disturbed land. These areas typically have a high incidence of nonnative plant species. Commonly identified species include fennel (*Foeniculum vulgare*), pineapple weed (*Matricaria discoidea*), ice plant (*Drosanthemum floribundum*), cotoneaster (*Cotoneaster* sp.), flax (*Linum grandiflorum, L. bienne, L. lewisii*), and thistles. Ornamental tree species observed include



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Note: Land cover types were only mapped within the extent of each facility improvement, not the entire campus.

Figure 3.3-1a
Land Cover Types Observed at Cañada College Adjacent to Proposed Improvements

olive, strawberry tree (*Arbutus unedo*), pear (*Prunus* sp.), Monterey pine (*Pinus radiata*), western sycamore (*Platanus racemosa*), eucalyptus (*Eucalyptus* sp.), and pepper tree (*Schinus molle*). Landscaped/disturbed plant species may provide valuable habitat elements, such as cover for nesting and roosting, as well as food sources, such as nuts or berries.

The majority of the Project area consists of vegetation indicative of landscaped/disturbed areas. A distinguishing characteristic of urban and suburban habitats is the mixture of native and nonnative plant species. Native and introduced animal species that have adapted to human activities often thrive in urban and suburban habitats. These species include western fence lizard (*Sceloporus occidentalis*), barn swallow (*Hirundo rustica*), European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), house finch (*Haemorhous mexicanus*), house mouse (*Mus musculus*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis virginiana*).

Coast Live Oak Woodland

Coast live oak woodland primarily occurs northeast of Building 1 and northeast of Building 22 at Cañada College. The dominant species in this vegetation community is coast live oak (*Quercus agrifolia*). Associated species include olive (*Olea europaea*), valley oak (*Quercus lobata*), chamise (*Adenostoma fasciculatum*), California sagebrush (*Artemisia californica*), toyon (*Heteromeles arbutifolia*), wedgeleaf ceanothus (*Ceanothus cuneatus*), blue dicks (*Dichelostemma capitatum*), *Monardella* sp., *Cotoneaster* sp., soap plant (*Chlorogalum pomeridianum*), poison oak (*Toxicodendron diversilobum*), and sourclover (*Melilotus indicus*).

This community occurs in a relatively small portion of the Project area, which primarily consists of vegetation indicative of landscaped/disturbed areas. As such, wildlife species expected to occur in this community are the same as those in the landscaped/disturbed areas.

Purple Needle Grass Grassland

Purple needle grass (*Stipa pulchra*) grassland shares similar herbaceous species cover as the associated coast live oak woodland northeast of Building 1 and nonnative annual grassland at Cañada College. CDFW considers purple needle grass grassland a special-status community (California Department of Fish and Game 2010).

This land cover type occurs in a relatively small portion of the Project area, so wildlife species expected to occur in this community are the same as those occurring in landscaped/disturbed areas.

Nonnative Annual Grassland

Nonnative annual grassland is characterized by sparse to dense cover of nonnative grasses, including red brome (*Bromus madritensis* subsp. *rubens*), ripgut grass (*Bromus diandrus*), oat (*Avena* sp.), and rye grass (*Festuca perennis*). Nonnative forbs, such as bristly ox-tongue (*Helminthotheca echioides*), black mustard (*Brassica nigra*), scarlet pimpernel (*Lysimachia arvensis*), stinkwort (*Dittrichia graveolens*), broad leaf filaree (*Erodium botrys*), Italian thistle (*Carduus pycnocephalus* subsp. *pycnocephalus*), milk thistle (*Silybum marianum*), and native California poppy (*Eschscholzia californica*), were typically observed in the nonnative annual grassland.

The nonnative annual grassland south of Parking Lot 10 at Cañada College supports a population of purple owl's clover (*Castilleja exserta*), which is a host plant for adult Bay checkerspot butterfly (*Euphydryas editha bayensis*); however, the California plantain (*Plantago erecta*), a larval host plant on which the species lays its eggs, was not observed within the Project area. This land cover type occurs in a relatively small portion of the Project area with the majority of the Project area consisting of vegetation indicative of landscaped/disturbed areas, so wildlife species expected to occur in this community are the same as those occurring in landscaped/disturbed areas.

3.3.2.2 College of San Mateo

Land cover types identified within the CSM Project area include landscaped/disturbed, coast live oak woodland, and northern coastal scrub. No wetlands or riparian communities were observed. Vegetation and wildlife habitat values of each cover type are briefly discussed below. Refer to **Figure 3.3-1b** for their locations.

Landscaped/Disturbed

The landscaped/disturbed land cover type at CSM can be found in and adjacent to existing buildings and the corporation yard. Plant and wildlife species composition is similar to that described for Cañada College and includes stands of eucalyptus (*Eucalyptus* sp.) planted along portions of the campus perimeter.

Coast Live Oak Woodland

The coast live oak woodland at CSM occurs approximately 20 feet northeast of Building 8. Species within this community are similar to those described for Cañada College.

Northern Coastal Scrub

Northern coastal scrub is located northeast of Building 34 at CSM. Northern coastal scrub contains coyote brush (*Baccharis pilularis*), blue elderberry (*Sambucus nigra* subsp. *caerulea*), toyon, tanoak (*Notholithocarpus densiflorus*), narrow leaved flax (*Linum bienne*), Douglas' iris (*Iris douglasiana*), western blue-eyed-grass (*Sisyrinchium bellum*), oat, ripgut grass, red brome, and scarlet pimpernel.

This land cover type occurs in a relatively small portion of the Project area with the majority of the Project area consisting of vegetation indicative of landscaped/disturbed areas, so wildlife species expected to occur in this community are the same as observed in landscaped/disturbed areas at Cañada College.

3.3.2.3 Skyline College

Land cover types identified within the Skyline College Project area include landscaped/disturbed, Monterey cypress stands, Monterey pine forest, and coastal sage scrub. No wetlands or riparian communities were observed. Vegetation and wildlife habitat values of each cover type are briefly discussed below. Refer to **Figure 3.3-1c** for their locations.

Landscaped/Disturbed

The landscaped/disturbed land cover type at Skyline College is similar to that described for Cañada College. It covers a majority of the Project area.



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Note: Land cover types were only mapped within the extent of each facility improvement, not the entire campus.

Figure 3.3-1b
Land Cover Types Observed at College of San Mateo Adjacent to Proposed Improvements



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Note: Land cover types were only mapped within the extent of each facility improvement, not the entire campus.

Figure 3.3-1c
Land Cover Types Observed at Skyline College Adjacent to Proposed Improvements

Monterey Cypress Stands

This community occurs at the south pedestrian gateway between Parking Lot E and Parking Lot C. The Monterey cypress (*Hesperocyparis macrocarpa*) stands are associated with French broom (*Genista monspessulana*), English ivy (*Hedera helix*), goose grass (*Galium aparine*), California blackberry (*Rubus ursinus*), pampas grass (*Cortaderia* sp.), *Polypodium* sp., orchard grass (*Dactylis glomerata*), twinberry (*Lonicera involucrata*), wild-ginger (*Asarum caudatum*), panic veldt grass (*Ehrharta erecta*), scarlet pimpernel, myoporum (*Myoporum laetum*), cape ivy (*Delairea odorata*), wood fern (*Dryopteris* spp.), and blue-eyed-grass. Native stands of Monterey cypress are considered a special-status community by CDFW (California Department of Fish and Game 2010), but there are only two remaining natural occurrences, both of which are located in Monterey County. This species is commonly planted as an ornamental tree throughout California, as here on the Skyline College campus, and has naturalized in many undeveloped areas.

Monterey Pine Forest

Monterey pine is found in stands north of College Road and south of Parking Lot L and to the west of Parking Lots F and G. Associated species include yarrow (*Achillea millefolium*), French broom, redstem filaree (*Erodium cicutarium*), plantain (*Plantago* sp.), purple needle grass, cotoneaster, goose grass, ripgut grass, and oat. CDFW considers native Monterey pine forest a special-status community by CDFW (California Department of Fish and Game 2010).

The stands of Monterey pine to the north and south of Vista Point (west of Parking Lots F and G) are associated with populations of silver lupine (*Lupinus albifrons*). The silver lupine occurs in openings of the Monterey pine canopy on granitic outcrops with other native species, including California poppy, Indian paintbrush (*Castilleja affinis*), *Dudley* sp., *Grindelia* sp., naked buckwheat (*Eriogonum nudum*), and *Phacelia* sp. Silver lupine is one of the host plants for the Mission blue butterfly.

A 1995 letter from USFWS to the District documents the occurrence of the Mission blue butterfly within these patches of silver lupine immediately west of the western extent of the existing developed portion of the campus based on surveys conducted in 1993 and 1994 (Medlin pers. comm.). The majority of the silver lupine occurs in a relatively small portion of the Project area with the majority of the Project area consisting of vegetation indicative of landscaped/disturbed areas, so other wildlife species expected to occur within this community are the same as those found within the landscaped/disturbed areas.

Coastal Sage Scrub

West of the dirt trail below Vista Point is coastal sage scrub dominated by California sagebrush (*Artemisia californica*), coyote brush, bush monkeyflower (*Mimulus aurantiacus*), and California coffee berry (*Frangula californica*).

This land cover type occurs in a relatively small portion of the Project area, with the majority of the Project area consisting of vegetation indicative of landscaped/disturbed areas, so wildlife species expected to occur within this community the same as those found within the landscaped/disturbed areas.

3.3.3 Impacts Analysis

3.3.3.1 Methodology

Potential adverse effects on special-status species in the Project area were evaluated based on a review of the available literature regarding the status and known distribution of special-status species in the region and data collected from reconnaissance-level surveys conducted by ICF biologists at Cañada College and CSM on April 20, 2015 and at Skyline College on April 22, 2015. Principal sources consulted during the analysis included the following.

- USFWS list of endangered and threatened species that may occur in or be affected by projects in the U.S. Geological Survey's (USGS) 7.5-minute quadrangles of San Francisco South, Montara Mountain, Woodside, Palo Alto, and San Mateo, current as of April 23, 2015 (U.S. Fish and Wildlife Service 2015) (**Appendix C,** *Biological Resources Documentation*). The quadrangles in which the Project is located were used because of the developed nature of the majority of the Project and the relatively small size of the Project; therefore, a nine-quadrangle search was not conducted.
- California Natural Diversity Database (CNDDB) query results for the San Francisco South, Montara Mountain, Woodside, Palo Alto, and San Mateo USGS 7.5-minute quadrangles, current as of April 23, 2015 (California Department of Fish and Wildlife 2015) (**Appendix C**). The rationale for using the individual quadrangle search for this query was the same as the USFWS query.
- CNPS's Electronic Inventory query results for the San Francisco South, Montara Mountain, Woodside, Palo Alto, and San Mateo USGS 7.5-minute quadrangles, current as of April 23, 2015 (California Native Plant Society 2015) (**Appendix C**).
- 2003 Initial Study for the Faculty/Staff Housing at College of San Mateo.
- 2007 Initial Study for the Faculty/Staff Housing Project at Cañada College.
- 2013 Initial Study for the Solar Photovoltaic System Project at Cañada College.
- 1995 Letter from USFWS to the San Mateo County Community College District regarding Mission blue butterfly at Skyline College (Medlin pers. comm.).

To refine the list of species potentially affected by activities of the Project, each species was evaluated for its potential to occur within any of the campuses and whether it would be affected by Project activities. The likelihood of each species occurring within or near the Project area was based on the following criteria.

- **None**—Potential habitat for the species is absent from the Project area, and there are no known occurrences within 2.5 miles. Species considered extirpated from the region are also included in this category. These species are not included in **Table 3.3-2** and **Table 3.3-3**.
- **Low**—Low-quality habitat for the species is present in the Project area but the known distribution of the species does not include the Project area and/or there are no known occurrences within 2.5 miles.
- **Moderate**—Low-quality habitat for the species is present within the Project area but higher quality habitat and/or known occurrences occur within 2.5 miles.
- **High**—High-quality habitat for the species is present within the Project area, and there are known occurrences on or within 2.5 miles of the Project area.

After reviewing all data sources and observations from the reconnaissance surveys, ICF developed a list of candidate, sensitive, and special-status species potentially occurring in the Project area. These species are listed in **Table 3.3-2** and **Table 3.3-3** for plants and wildlife, respectively. CNDDB special-status plant and wildlife species occurrences within 2.5 miles of the campuses are shown in **Figures 3.3-2a** through **3.3-2c** and **3.3-3a** through **3.3-3c**, respectively. Many of the species in the CNDDB and USFWS lists in **Appendix C** are known to occur in San Mateo County and are distributed throughout the San Francisco Bay region but were eliminated from consideration (i.e., there is no potential for them to occur in the Project area) based on the absence of natural plant communities and/or substrates on which they depend (e.g., tidal salt marsh, freshwater streams, open waters of San Francisco Bay, chaparral, vernal pools, rocky soils, serpentinite).

Table 3.3-2. Special-Status Plant Species Potentially Occurring in the Project Area

Species	Status[A] Fed/State/CRPR	Habitat	Geographic Distribution	Identification Period	Likelihood of Occurrence[B]
Amsinckia lunaris bent-flowered fiddleneck	--/--/1B.2	Coastal bluff scrub, valley and foothill grasslands, cismontane woodlands; 3–500 m	Inner North Coast Ranges, San Francisco Bay Area, west-central Great Valley.	March–June	**Low.** One CNDDB occurrence within 2.5 miles of CSM; low-quality habitat present.
Arctostaphylos andersonii Anderson's manzanita	--/--/1B.2	Openings and edges of chaparral, broadleaved upland forest, North Coast coniferous forest; 60–760 m	Santa Cruz Mountains in Santa Clara, Santa Cruz, and San Mateo Counties.	November–May	**Low.** Low-quality habitat present.
Arctostaphylos regismontana Kings Mountain manzanita	--/--/1B.2	Granitic or sandstone soils in broadleaved upland forest, chaparral, North Coast coniferous forest; 305–730 m	Western San Francisco Bay region, northern Santa Cruz Mountains: Santa Clara, Santa Cruz, and San Mateo Counties.	January–April	**Low**. Three CNDDB occurrences within 2.5 miles of Cañada College; low-quality habitat present.
Cirsium occidentale var. *compactum* compact cobwebby thistle	--/--/1B.2	Chaparral, coastal dunes, coastal prairie, coastal scrub; 5–150 m	Monterey, San Francisco, and San Luis Obispo Counties.	April–June	**Low**. Low-quality habitat present.
Collinsia multicolor San Francisco collinsia	--/--/1B.2	Closed-cone coniferous forest, coastal scrub; 30–250 m	Coastal California from San Francisco to Monterey County.	March–May	**Low**. Two occurrences within 2.5 miles of CSM and Cañada College (one for each campus); low- quality habitat present.
Dirca occidentalis western leatherwood	--/--/1B.2	Moist areas in broadleaved upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, North Coast coniferous forest, riparian forest, riparian woodland; 25–425 m.	San Francisco Bay region, Alameda, Contra Costa, Marin, Santa Clara, San Mateo, and Sonoma Counties.	January–March (April)	**Moderate.** One CNDDB occurrence within 2.5 miles of CSM; one CNDDB occurrence within 2.5 miles of Skyline College; three CNDDB occurrences within 2.5 miles of Cañada College; suitable habitat present in woodland cover types but low-quality microhabitat conditions.

Species	Status[A] Fed/State/CRPR	Habitat	Geographic Distribution	Identification Period	Likelihood of Occurrence[B]
Eriophyllum latilobum San Mateo woolly sunflower	FE/SE/1B.1	Open areas in coast live oak woodland, often on roadsides, sometimes on serpentinite; 45–150 m.	One known occurrence in San Mateo County.	May–June	**Low**. One CNDDB occurrence within 2.5 miles of CSM: low-quality habitat present.
Fritillaria liliacea fragrant fritillary	--/--/1B.2	Adobe soils of interior foothills, coastal prairie, coastal scrub, valley and foothill grassland, often on serpentinite; 3–410 m.	Coast Ranges from Marin County to San Benito County.	February–April	**Moderate**. Three CNDDB occurrences within 2.5 miles of CSM; three CNDDB occurrences within 2.5 miles of Cañada College; suitable habitat present but low quality microhabitat conditions within project area.
Helianthella castanea Diablo helianthella	--/--/1B.2	At chaparral/oak woodland ecotone, often in partial shade, on rocky soils, also coastal scrub, riparian woodland, broadleafed upland forest, valley and foothill grassland; 60–1300 m.	San Francisco Bay area: Alameda, Contra Costa, Marin, San Francisco, and San Mateo Counties.	March–June	**Low**. Low-quality habitat present.
Hemizonia congesta ssp. *congesta* congested-headed hayfield tarplant	--/--/1B.2	Valley and foothill grassland, sometimes roadsides; 20–560 m.	Mendocino, Marin, San Francisco, San Mateo, Sonoma Counties.	April–November	**Moderate**. One CNDDB occurrence within 2.5 miles of Skyline; suitable habitat present but low quality microhabitat conditions.
Horkelia cuneata var. *sericea* Kellogg's horkelia	--/--/1B.1	Openings in closed-cone coniferous forest, coastal scrub, maritime chaparral, on sandy or gravelly soils; 10–200 m.	Coastal California from San Mateo to Santa Barbara Counties, formerly further north.	April–September	**Low.** One CNDDB occurrence within 2.5 miles of Skyline College; low-quality habitat present.

Species	Status[A] Fed/State/CRPR	Habitat	Geographic Distribution	Identification Period	Likelihood of Occurrence[B]
Lilium maritimum coast lily	--/--/1B.1	Broadleaved upland forest, closed-cone Pine-cypress forest, coastal prairie, coastal scrub, freshwater marshes and swamps, perennial grassland, North Coast coniferous forest, often in roadside ditches; 5–475 m.	North Coast in Mendocino, Marin, San Francisco, San Mateo, and Sonoma Counties.	May–August	**Low.** Low-quality habitat present.
Lupinus arboreus var. *eximius* San Mateo tree lupine	--/--/3.2	Chaparral, coastal scrub; 90–550 m.	San Mateo County.	April–July	**Low.** Low-quality habitat present.
Malacothamnus arcuatus arcuate bush-mallow	--/--/1B.2	Chaparral, cismontane woodland; 15–355 m.	San Mateo, Santa Cruz, and Santa Clara Counties.	April–September	**Low.** Two CNDDB occurrences within 2.5 miles of CSM; one CNDDB occurrence within 2.5 miles of Cañada College; low-quality habitat present.
Malacothamnus davidsonii Davidson's bush-mallow	--/--/1B.2	Coastal scrub, chaparral, cismontane woodland, and riparian woodland in sandy washes; 185–855 m.	San Mateo, Monterey, Santa Clara, San Luis Obispo, and Los Angeles Counties.	June–January	**Low.** Low-quality habitat present.
Malacothamnus hallii Hall's bush-mallow	--/--/1B.2	Chaparral and coastal scrub; 10–760 m.	Alameda, Contra Costa, Mendocino, Merced, Santa Clara, San Mateo, and Stanislaus Counties.	May–September (October)	**Low.** One CNDDB occurrence within 2.5 miles of CSM; low-quality habitat present.
Micropus amphibolus Mount Diablo cottonweed	--/--/3.2	Rocky sites in broadleafed upland forest, mixed evergreen forest, oak woodland, chaparral, valley and foothill grasslands; 45–825 m.	Coast Ranges from Lake County to Santa Barbara County.	March–May	**Low.** Low-quality habitat present.

Species	Status[A] Fed/State/CRPR	Habitat	Geographic Distribution	Identification Period	Likelihood of Occurrence[B]
Pedicularis dudleyi Dudley's lousewort	--/SR/1B.2	Maritime chaparral, North Coast coniferous forest, valley and foothill grassland, cismontane woodland; 60–900 m.	Monterey, San Luis Obispo, and San Mateo Counties.	April–June	**Low.** Low-quality habitat present.
Plagiobothrys chorisianus var. *chorisianus* Choris' popcornflower	--/--/1B.2	Mesic sites in chaparral, coastal prairie, coastal scrub; 15–160 m.	Southwest San Francisco Bay Area, northern Central Coast: Santa Cruz, San Francisco and San Mateo Counties.	March–June	**Moderate.** One CNDDB occurrence within 2.5 miles of Skyline College; suitable habitat present but low quality microhabitat conditions.
Polemonium carneum Oregon polemonium	--/--/2B.2	Coastal prairie, coastal scrub, lower montane coniferous forest; 0–1830 m.	Alameda, Del Norte, Humboldt, Marin, San Francisco, Siskiyou, San Mateo, Sonoma Counties; also Oregon, Washington.	April–September	**Low.** Low-quality habitat present.
Silene verecunda ssp. *verecunda* San Francisco campion	--/--/1B.2	Sandy soils in coastal bluff scrub, chaparral, coastal prairie, coastal scrub, valley and foothill grassland; 30–645 m.	Northern Central Coast, San Francisco Bay area: San Francisco, San Mateo, Santa Cruz, and Sutter Counties.	March–June(August)	**Low**. One CNDDB occurrence within 2.5 miles of Cañada College; low-quality habitat present.
Trifolium amoenum showy rancheria clover	FE/--/1B.1	Low elevation grasslands, including swales and disturbed areas, sometimes on serpentinite soils; 5–41 5m.	Coast Range foothills in the San Francisco Bay region, currently known from only two recent occurrences in Marin County.	April–June	**Moderate.** One CNDDB occurrence within 2.5 miles of Skyline College; suitable habitat present but low quality microhabitat conditions.
Triquetrella californica Moss: coastal triquetrella	--/--/1B.2	On soil in coastal bluff scrub and coastal scrub, often down slope from rock outcrops, usually within 10 miles of the coast; 10–100 m.	Scattered localities in Coastal California: Contra Costa, Del Norte, Mendocino, San Diego, Sonoma, and San Francisco Counties; Oregon.	N/A	**Low**. One CNDDB occurrence within 2.5 miles of Skyline College; low-quality habitat present.

Species	Status[A] Fed/State/CRPR	Habitat	Geographic Distribution	Identification Period	Likelihood of Occurrence[B]
Usnea longissimi Lichen: Long-beard lichen	--/--/4.2	North Coast coniferous forest, broadleafed upland forest; grows on a variety of trees in the "redwood zone," including big leaf maple, oaks, ash, Douglas-fir, and bay; 50–1,460 m.	California populations are centered in Humboldt County, with additional occurrences in Del Norte, Mendocino, Sonoma, Santa Cruz, and San Mateo Counties; Alaska, Alabama, Maine, Michigan, Minnesota, Missouri, Montana, New Hampshire, New York, Oregon, Scout Carolina, Vermont, Washington, and Wisconsin.	N/A	**Low.** Low-quality habitat present.

Notes:

[A] Status Codes

-- no listing.
FE listed as endangered under the federal Endangered Species Act.
FT listed as threatened under the federal Endangered Species Act.
SE listed as endangered under the California Endangered Species Act.
ST listed as threatened under the California Endangered Species Act.
SR listed as rare under the California Native Plant Protection Act (no longer used for newly listed plants, but some plants previously listed as rare retain this designation).
1B California Rare Plant Rank (CRPR) 1B: rare, threatened, or endangered in California and elsewhere.
2B CRPR 2B: rare, threatened, or endangered in California, but more common elsewhere.
4 CRPR 4: plants of limited distribution—a watch list.
0.1 = Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2 = Moderately threatened in California (20–80% occurrences threatened / moderate degree and immediacy of threat)
0.3 = Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

[B] Likelihood of Occurrence

High: Known occurrence of plant within 2.5 miles of the project vicinity from CNDDB or other documents, or presence of suitable habitat conditions and suitable microhabitat conditions.
Moderate: Known occurrence of plant within 2.5 miles of the project vicinity from CNDDB or other documents; suitable habitat is present but suitable microhabitat conditions are not.
Low: Plant not known to occur within 2.5 miles of the project vicinity from CNDDB or other documents, or habitat conditions are of poor quality, or species presumed extirpated from project vicinity.
None: Plant not known to occur within 2.5 miles of the project vicinity from CNDDB or other documents, or suitable habitat not present in any condition.

Table 3.3-3. Special-Status Wildlife Species Potentially Occurring in or near the Project Area

Species	Status[A] (Federal/State/Other)	Geographic Distribution	Habitat Requirements	Likelihood of Occurrence[B]
Invertebrates				
Icaricia icarioides missionensis mission blue butterfly	FE/--/--	San Bruno Mountain, San Mateo County; Twin Peaks, San Francisco County.	Hill and ridgetops, as well as slopes with south exposure with caterpillar food plants, lupine (*Lupinus albifrons, L. variicolor, and L. formosus*).	**High.** Clearings within the Monterey Pine stands within and near the footprint of the new environmental science building at the west edge of the Skyline College campus support the larval host plant for this species.
Amphibians and Reptiles				
Rana draytonii California red-legged frog	FT/--/SSC	Found along the coast and coastal mountain ranges of California from Marin County to San Diego County and in the Sierra Nevada from Tehama County to Fresno County.	Permanent and semi-permanent aquatic features (e.g., creeks and coldwater ponds) with emergent and submergent vegetation.	**Moderate.** CNDDB includes record approximately 0.3 mile west of Skyline College campus in valley below western portion of proposed environmental science building. Individuals from this population, if still viable, could potentially move into project footprint during heavy rains. Freshwater breeding or movement habitat absent from project area, however. Other known occurrences isolated from Cañada and San Mateo College campuses by Interstate 280.
Birds				
Circus cyaneus northern harrier	--/--/SSC	Occurs throughout lowland California. Has been recorded in fall at high elevations.	Grasslands, meadows, marshes, and seasonal and agricultural wetlands.	**Moderate (foraging only).** May occasionally forage over grassland in project area but no nesting habitat due to routine human disturbance and mowing of grassland.

Species	Status[A] (Federal/State/Other)	Geographic Distribution	Habitat Requirements	Likelihood of Occurrence[B]
Elanus leucurus white-tailed kite	--/--/FP	Occurs in the lowlands west of Sierra Nevada from Sacramento Valley south, including coastal valleys and foothills to western San Diego County.	Dense-topped trees or shrubs for nesting, open grasslands, marshes, or agricultural fields for foraging.	**Moderate (foraging and nesting).** Limited foraging habitat (grassland and landscaped/disturbed areas) within project area, but suitable nest sites present on all three campuses (Monterey pine forest, Monterey cypress stand, coast live oak woodland, and northern coastal scrub). Routine human presence and disturbance reduce likelihood of nesting within or near project area.
Falco peregrines anatum peregrine falcon	--/--/FP	Permanent resident along the north and south Coast Ranges. May summer in the Cascade and Klamath Ranges and through the Sierra Nevada to Madera County. Winters in the Central Valley south through the Transverse and Peninsular Ranges and the plains east of the Cascade Range.	Nests and roosts on protected ledges of high cliffs, usually adjacent to lakes, rivers, or marshes that support large prey populations.	**Low.** Individuals may occasionally fly over and forage in project vicinity, but nesting habitat absent.
Mammals				
Antrozous pallidus pallid bat	--/SSC/WBWG-High	Occurs throughout California except the high Sierra from Shasta to Kern County and the northwest coast, primarily at lower and mid elevations	Occurs in a variety of habitats from desert to coniferous forest. Most closely associated with oak, yellow pine, redwood, and giant sequoia habitats in northern California and oak woodland, grassland, and desert scrub in southern California. Relies heavily on trees for cavity roosts, but will use crevices in man-made structures.	**Moderate.** One occurrence within 2.5 miles of Skyline College campus. Pallid bats typically nest in crevices in xeric areas and trees. Cavities may be present within large trees on all three campuses and could therefore provide roosting habitat.

Species	Status[A] (Federal/State/Other)	Geographic Distribution	Habitat Requirements	Likelihood of Occurrence[B]
Lasiurus cinereus hoary bat	--/--/WBWG-Medium	Widespread throughout California.	Roosts in trees, typically within forests.	**Moderate.** One, two, and one occurrence(s) within 2.5 miles of Skyline College, SMC, and Cañada College, respectively. Potential roosting habitat present in woodland on all three campuses.
Myotis thysanodes fringed myotis	--/--/WBWG-High	Occurs throughout California except the southeastern deserts and the Central Valley.	Found in a wide variety of habitats from low desert scrub to high elevation coniferous forests. Day and night roosts in caves, mines, trees, buildings, and rock crevices.	**Moderate.** One occurrence within 2.5 miles of Skyline College campus at Milagra Ridge County Park. Potential roosting habitat present in woodland on all three campuses.

Notes:

[A] Status Codes

-- no listing.
FE listed as endangered under the federal Endangered Species Act.
FT listed as threatened under the federal Endangered Species Act.
PD proposed for delisting under the federal Endangered Species Act
SE listed as endangered under the California Endangered Species Act.
ST listed as threatened under the California Endangered Species Act.
SSC listed as a Species of Special Concern by the State of California
FP California fully protected species
WBWG Western Bat Working Group conservation priority (High or Medium)

[B] Likelihood of Occurrence

High: Known occurrences of the species within the study area, or CNDDB, or other documents, records the occurrence of the species within a 2.5-mile radius of the project area; suitable habitat is present within the project area.

Moderate: CNDDB, or other documents, records the known occurrence of the species within a 2.5-mile radius of the project area; poor quality suitable habitat is present within the project area.

Low: CNDDB, or other documents, does not record the occurrence of the species within a 2.5-mile radius of the project area; suitable habitat is present within the project area.

Species with "moderate" or "high" potential to occur in the Project area and native bird species protected under the MBTA and California Fish and Game Code were considered in the impact analysis. Where impacts would be significant, mitigation measures were identified to reduce these impacts to a less-than-significant level.

Species with moderate or high potential to occur within the Project area include the following.

- Plants:
  - Western leatherwood (*Dirca occidentalis*)
  - Fragrant fritillary (*Fritillaria liliaceae*)
  - Congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*)
  - Choris' popcornflower (*Plagiobothrys chorisianus* var. *chorisianus*)
  - Showy rancheria clover (*Trifolium amoenum*)
- Wildlife:
  - Mission blue butterfly (*Icaricia icarioides missionensis*)
  - California red-legged frog (*Rana draytonii*)
  - White-tailed kite (*Elanus leucurus*)
  - Northern harrier (*Circus cyaneus*)
  - Fringed myotis (*Myotis thysanodes*)
  - Pallid bat (*Antrozous pallidus*)
  - Hoary bat (*Lasiurus cinereus*)

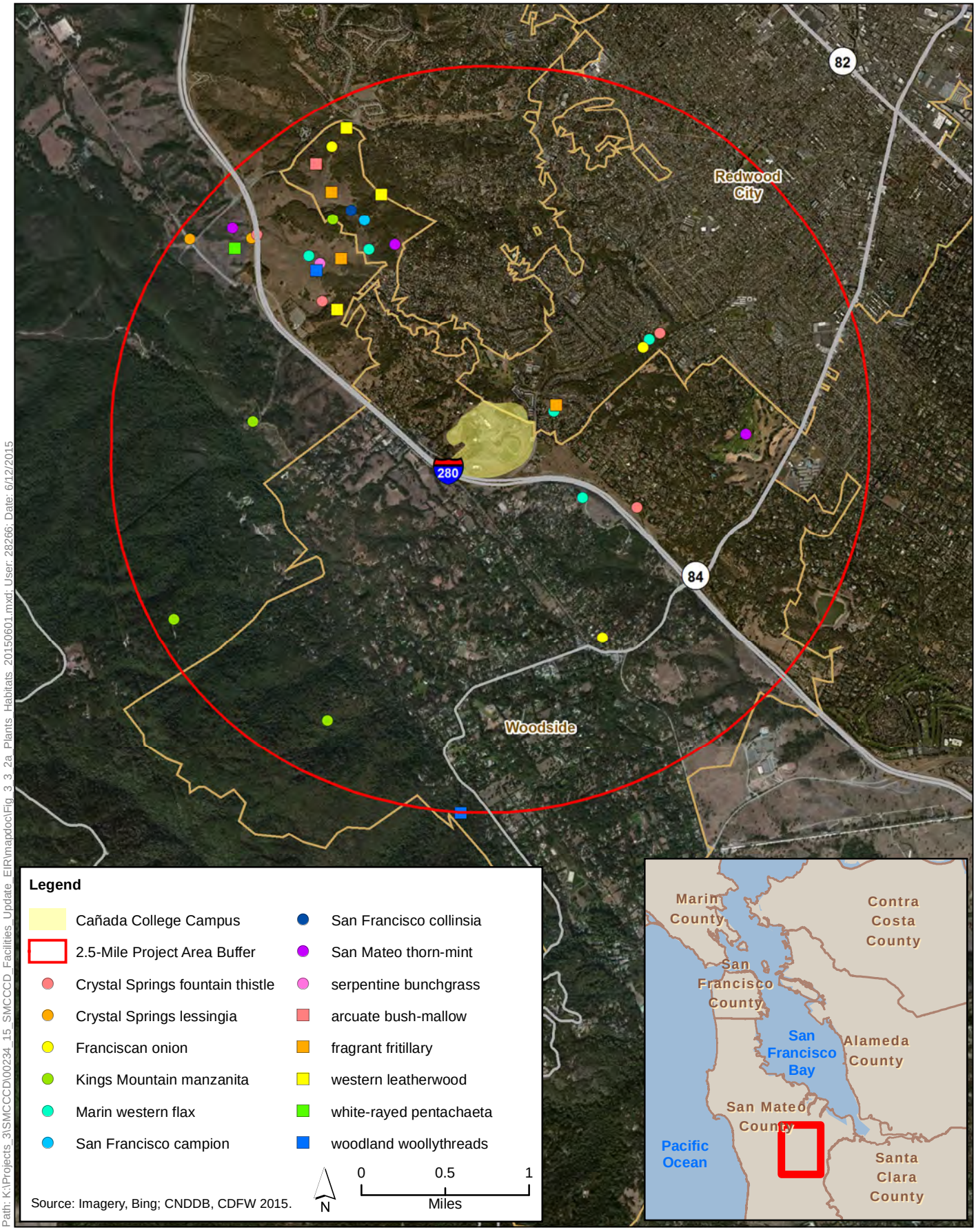
Although northern harrier may occasionally forage over grassland cover types within the Project area, it is not expected to nest due to ongoing disturbance from human activity, and thus would not be affected by the Project. However, Project activities could potentially affect the five special-status plant and remaining six special-status wildlife species.

3.3.3.2 Significance Criteria

The State CEQA Guidelines Appendix G (14 CCR 15000 et seq.) has identified significance criteria to be considered for determining whether a project could have significant impacts on existing biological resources.

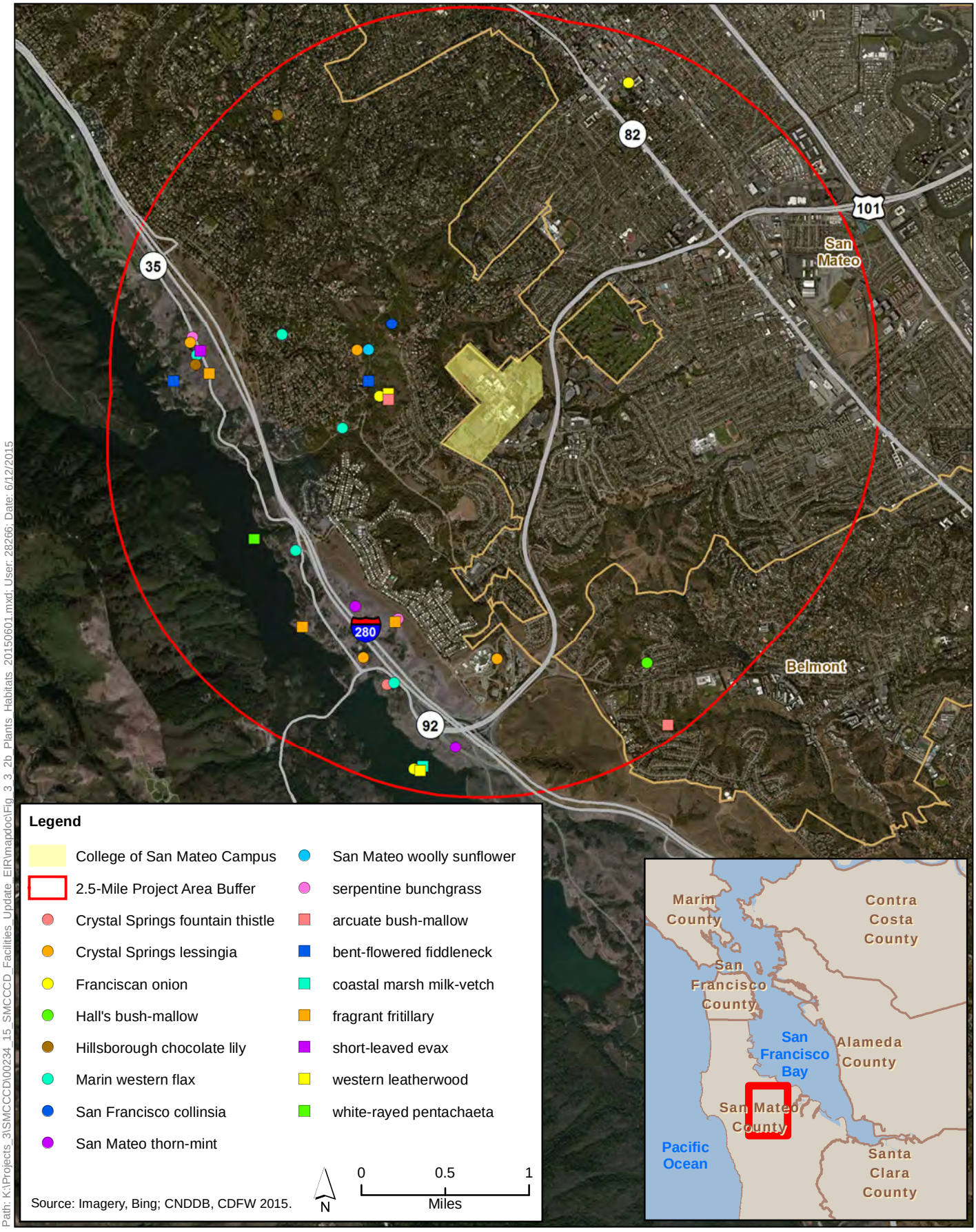
An impact would be considered significant if construction or operation of the Project would have any of the following consequences.

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.



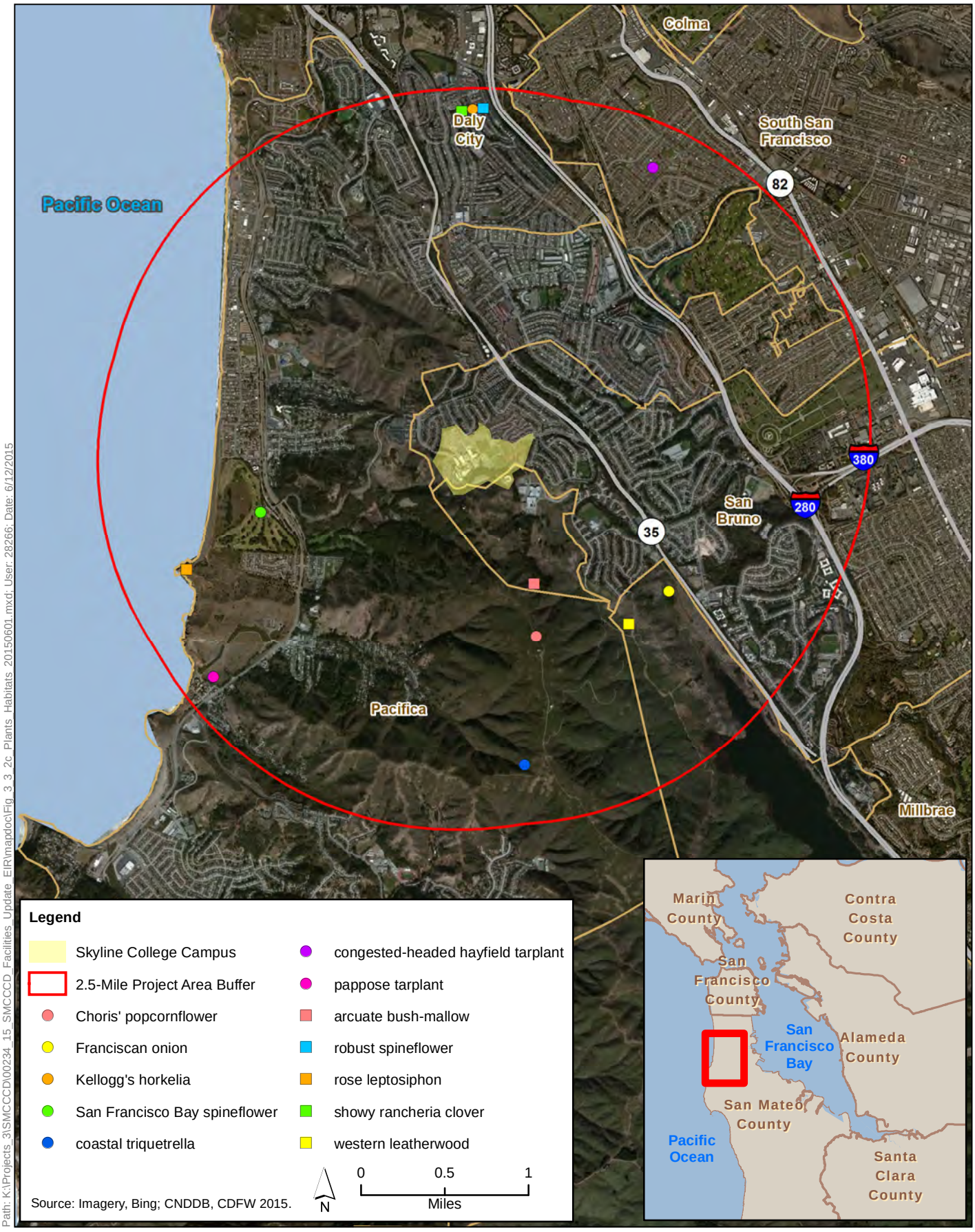
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Figure 3.3-2a
CNDDB Plant and Community Occurrences near Cañada College



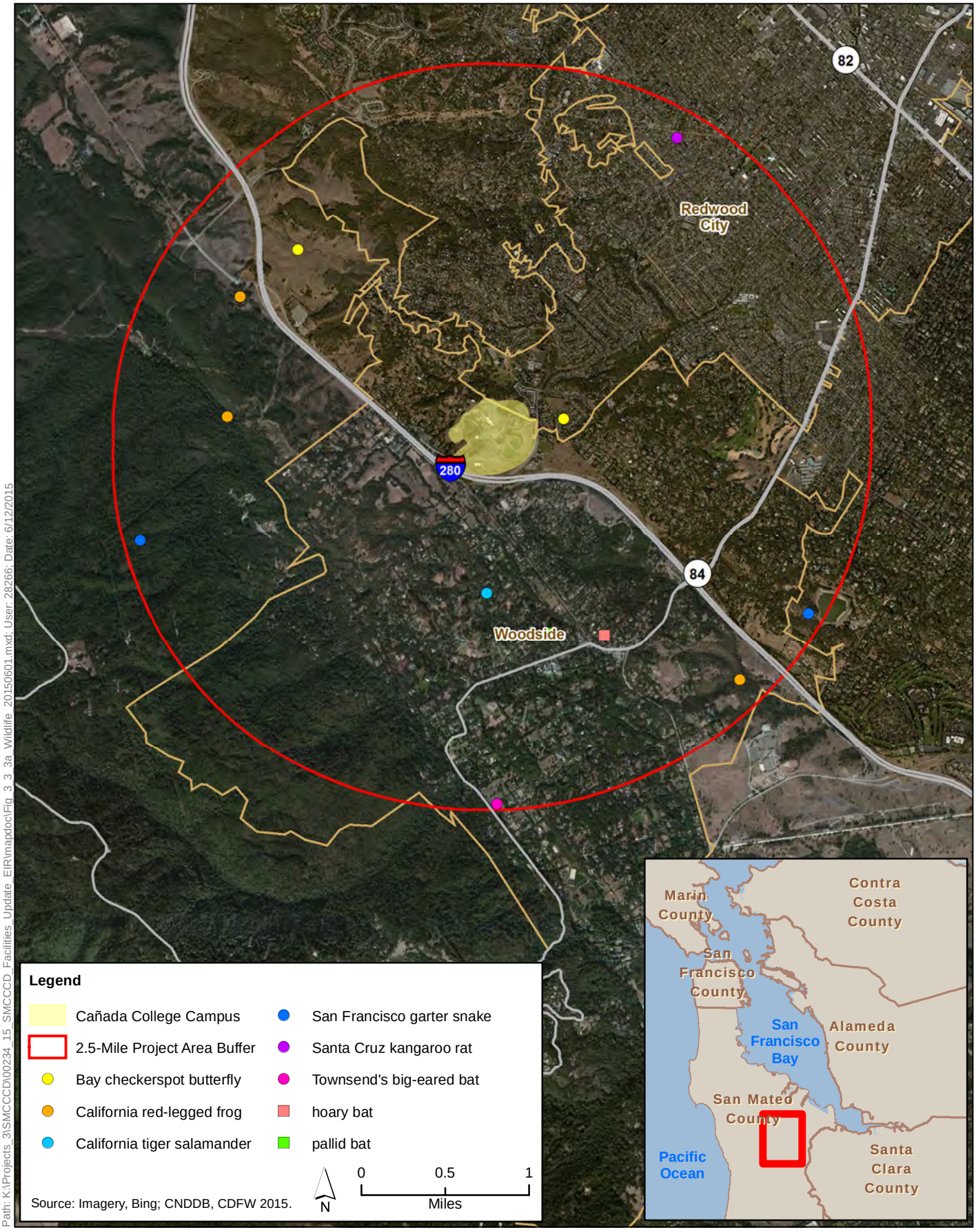
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Figure 3.3-2b
CNDDB Plant and Community Occurrences near College of San Mateo



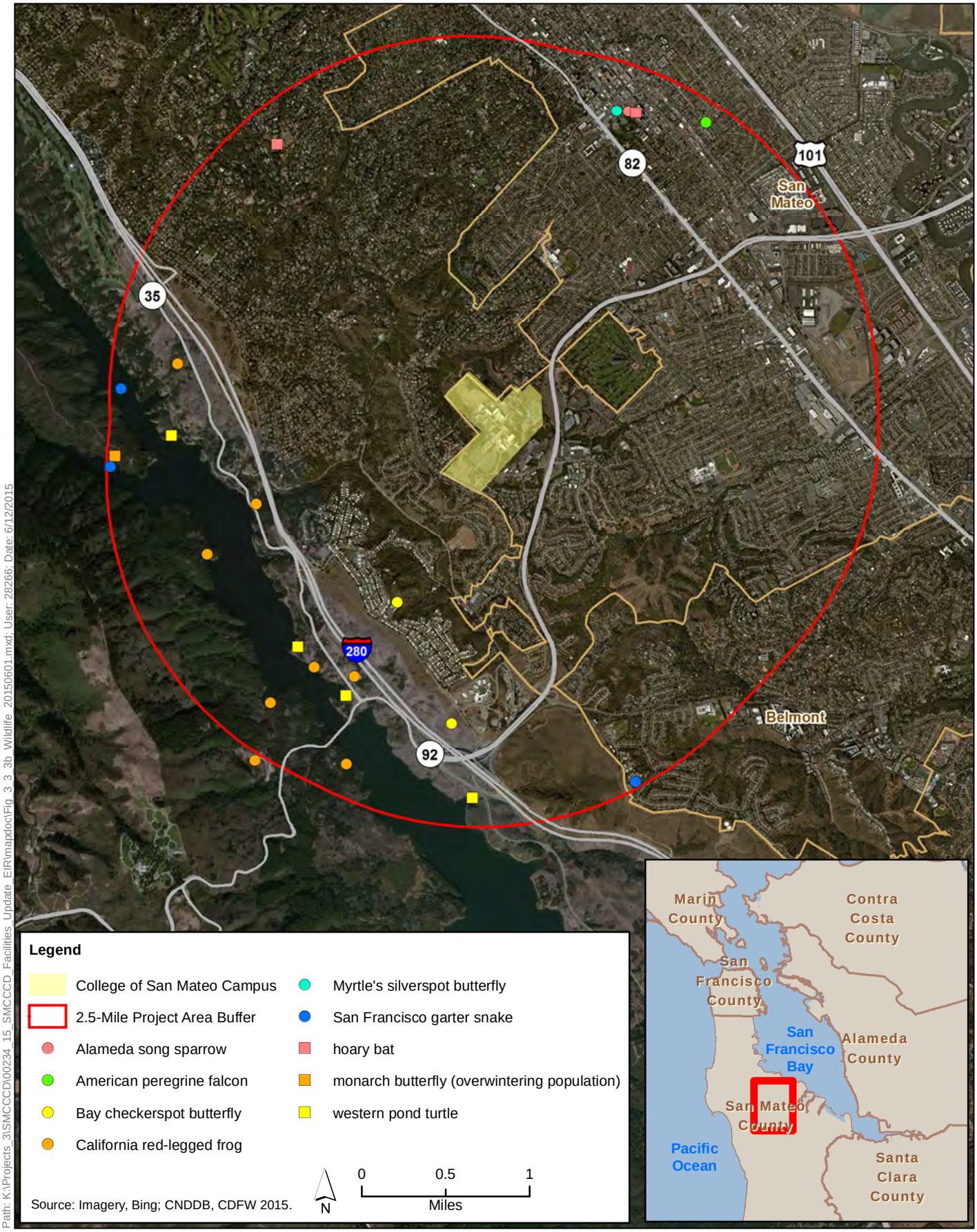
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Figure 3.3-2c
CNDDB Plant and Community Occurrences near Skyline College



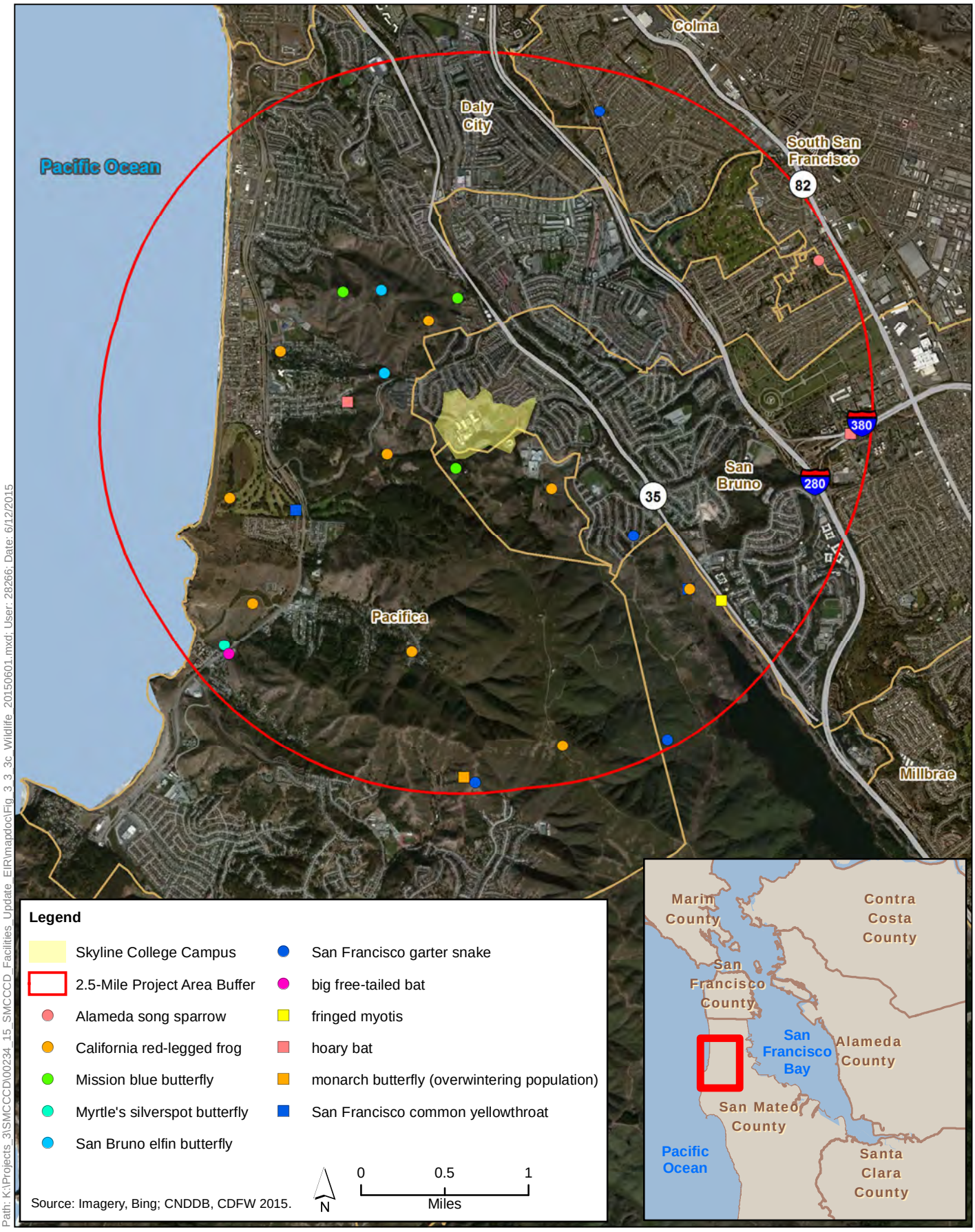
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Figure 3.3-3a
CNDDB Wildlife Occurrences near Cañada College



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Figure 3.3-3b
CNDDB Wildlife Occurrences near College of San Mateo



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Figure 3.3-3c
CNDDB Wildlife Occurrences near Skyline College

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

3.3.3.3 Impacts and Mitigation Measures

Cañada College

With respect to the significance criteria above, there would be no impact on the following resources at Cañada College. Thus, they are not discussed further with respect to potential impacts from facility improvements on the Cañada College campus.

- Wetlands. No wetlands or other waters of the United States were observed on the potentially affected areas of the Cañada College campus.
- Migratory Fish or Wildlife. There are no known migratory routes for terrestrial wildlife through the Cañada College Project area, and no aquatic habitat is present. Land cover types within the Project area are not significantly different from the surrounding landscape, excepting a high degree of landscaped/disturbed (including development) land cover that fragments undeveloped areas with natural vegetation. Therefore, construction of the Project is not expected to have an impact on any established migratory fish or wildlife routes.
- Local Policies. The District is exempt from local zoning ordinances. The Project's consistency with the related ordinances is discussed below in the discussion of Impact CC-BIO-1.
- Habitat Conservation Plan. There are no existing or pending habitat conservation plans or natural community conservation plans that include the Project area.

Impact CC-BIO-1: Impact special-status plant species (less than significant with mitigation)

Most improvements at Cañada College would take place on disturbed landscaped/disturbed land, and there would be limited potential for special-status plant species to exist. Special-status plant species have the potential to occur in undeveloped areas with suitable habitat, namely areas that support natural land cover. As noted in Section 3.3.2, *Environmental Setting*, such areas are limited at Cañada College. However, where suitable habitat occurs, Project activities could result in direct impacts (i.e., loss of individuals or colonies) and/or indirect (e.g., habitat modification resulting in increased competition from nonnative invasive plants) impacts on special-status plant species.

Any trees, including those that might be considered heritage trees under the Redwood City or the Town of Woodside tree ordinances that are removed as part of the Project would be replaced on campus. Therefore, the Project would be generally consistent with the related municipal tree ordinances. The Project does not include any street trees on roads outside of the campus and, therefore, would not invoke Redwood City's street tree ordinance. With implementation of

Mitigation Measure CC-BIO-1, the impacts on special-status plants on the Cañada College campus would be less than significant.

Mitigation Measure CC-BIO-1: Implement special-status plant species avoidance and revegetation measures at Cañada College

Prior to construction, the District will retain a qualified botanist to survey any areas of proposed construction disturbance that contain suitable habitat for western leatherwood, fragrant fritillary, congested-headed hayfield tarplant, Choris' popcornflower, and showy Rancheria clover. The qualified botanist will survey appropriate areas of suitable habitat for the species during each species' blooming period (**Table 3.3-2**). Surveys will be conducted in accordance with CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (California Department of Fish and Game 2009).

If no special-status plants are identified during the design-period surveys, then no further action is necessary. If one or more special-status species is found within areas proposed for disturbance, then the occurrence will be avoided, if feasible. If avoidance is not possible, a revegetation and monitoring plan will be developed and executed by a qualified botanist retained by the District prior to ground disturbance that would affect the plants. The revegetation and monitoring plan will include the following components.

- Collection of seed prior to disturbance.
- Reseeding and revegetation on a site with suitable soils and exposure.
- Regular monitoring to evaluate the success of the reseeding and revegetation and remedial measures if necessary.

The plan will include revegetation success criteria of 80% of the reseeded target area, perpetual conservation of restoration areas, weed management, limitations on human access, monitoring for at least five years and until successful revegetation is demonstrated for 3 consecutive years and remediation measures if success is not achieved by year 5. In the event that success is not achieved by year 5, monitoring will continue until the success criteria are completely satisfied for 3 consecutive years.

Impact CC-BIO-2: Impact special-status bird species (less than significant with mitigation)

Ground disturbance activities could result in direct or indirect mortality of nesting birds, including white-tailed kite, through crushing, parental abandonment of young, reduced fitness, reduction in number of available prey, and degradation or loss of habitat. Removal of trees or other vegetation could result in the destruction of active bird nests. Birds that nest on existing buildings within or near the Project area could be disturbed by the demolition of these structures (particularly Building 1, Gymnasium) or by construction of Project elements. Other temporary impacts on nesting birds resulting from construction activities would include air pollution from dust and construction equipment and construction noise and vibration. With implementation of **Mitigation Measure CC-BIO-2**, impacts on active nests of native species protected by the MBTA and Section 3503 of the California Fish and Game Code would be less than significant.

Mitigation Measure CC-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at Cañada College

Prior to any construction activities scheduled during the bird nesting season (February 1 to August 31), the District will retain a qualified wildlife biologist with demonstrated nest-searching experience to conduct preconstruction surveys for nesting birds, including raptors. The preconstruction survey will occur no more than 3 days prior to the onset of ground disturbing activities (including clearing, grubbing, and staging). If active nests are found during the survey, no-disturbance species-specific buffer zones will be established by the biologist and marked with high-visibility fencing, flagging, or pin flags. No construction activities will be allowed within the buffer zones. The size of the buffer will be based on the species' sensitivity to disturbance and planned work activities in the vicinity; typical buffer sizes are 250 feet for raptors and 50 feet for other birds. The buffer will remain in effect until the nest is no longer active. If a lapse in Project-related activities of 15 days or longer occurs, another preconstruction survey will be conducted.

To the extent feasible, the District or its contractor will initiate building demolition outside of the nesting season to avoid impacts on active nests affixed to the structure before they become active during the nesting season (February 1 to August 31). If structure demolition activities cannot occur outside of the nesting season, the District or its contractor will remove inactive nests from the structure to be demolished and install nest exclusion measures (i.e., fine mesh netting, panels, or metal projectors) outside of the nesting season. All exclusionary devices will be monitored and maintained throughout the breeding season to ensure that they are successful in preventing the birds from accessing the cavities or nest sites. No more than 3 days prior to building demolition activities, a qualified biologist will conduct a preconstruction survey of all potential nesting habitat on the structure to be demolished and the surrounding areas for the presence of active nests. If active nests are found on the building or in the affected area, then demolition activities will not proceed until the biologist verifies that all nests on the building are inactive.

After all surveys and/or nest deterrence activities are completed, the biologist will complete a memorandum detailing the survey effort and results and submit the memorandum to the District within 7 days of survey completion.

Impact CC-BIO-3: Impact special-status bats (less than significant with mitigation)

Ground disturbance and vegetation removal activities on the Cañada College campus could result in the direct or indirect mortality or injury of individual special-status bats belonging to special-status species through crushing, parental abandonment of young, reduced fitness, and degradation or loss of habitat. Where tree or other vegetation removal is necessary, the Project could disturb bat roosting habitat. Other temporary impacts on bat species resulting from construction activities would include air pollution from dust and construction equipment and construction noise and vibration. Although the potential to encounter special-status bat species is low, construction activities and related effects would still have potential to disturb habitat and individual fringed myotis, pallid bat, and hoary bat. With implementation of **Mitigation Measure CC-BIO-3**, this impact would be less than significant.

Mitigation Measure CC-BIO-3: Implement fringed myotis, pallid bat, and hoary bat avoidance measures at Cañada College

Prior to the start of construction activities at sites offering suitable bat roosting habitat, the District will retain a qualified wildlife biologist with demonstrated bat field experience to conduct preconstruction surveys for fringed myotis, pallid bat, and hoary bat. Surveys will take place no more than 7 days prior to the onset of site preparation (e.g., tree removal) and construction activities with the potential to disturb bats or their habitat and will include close inspection of potential bat roosts, such as trees and any built features within the Project footprint.

If special-status bats are found in the footprint of a proposed improvement and avoidance of roosting areas is not possible, avoidance and minimization measures will be required if it is determined that bats are using the trees as roost sites and/or sensitive bat species are detected during acoustic monitoring. Appropriate measures will be determined in coordination with CDFW and may include the following measures.

- Tree removal will be avoided between April 15 and September 15 (the maternity period) to avoid impacts on pregnant females and active maternity roosts (whether colonial or solitary).
- All tree removal will be conducted between September 15 and October 30, which corresponds to a time period when bats have not yet entered torpor or would be caring for non-volant young.
- Trees will be removed in pieces, rather than felling the entire tree.
- If a maternity roost is located, whether solitary or colonial, that roost will remain undisturbed until September 15 or until a qualified biologist has determined the roost is no longer active.
- If avoidance of non-maternity roost trees is not possible, and tree removal or trimming must occur between September 15 and October 30, qualified biologists will monitor tree trimming/removal. Prior to removal/trimming, each tree will be gently shaken and several minutes should pass before felling trees or trimming limbs to allow bats time to arouse and leave the tree. The biologists should search downed vegetation for dead and injured bats. The presence of dead or injured bats that are species of special concern will be reported to CDFW.
- Compensatory mitigation for the loss of roosting habitat will also be determined through consultation with CDFW and may include the construction and installation of suitable replacement habitat (e.g., bat houses, planting cottonwood trees) onsite.

The District will be responsible for ensuring that CDFW requirements are implemented. Multiple survey visits and survey methods may be required at a single site to determine presence or absence of roosting bats depending on season and roost type.

Impact CC-BIO-4: Impact purple needle grass grasslands, a sensitive natural community (less than significant)

One sensitive natural community was identified in the Cañada College Project Area—purple needle grass grassland. A key consideration for impact analysis is whether or not a natural community is a high-quality occurrence of the given community. Only a few reflect the most exemplary qualities of

natural vegetation which include (1) lack of invasive exotic species, (2) no evidence of human-caused disturbance such as roads, (3) evidence of reproductive success, and (4) no significant insect or disease damage (California Department of Fish and Wildlife 2015).

The purple needle grass grassland at Cañada College is associated with dense nonnative annual grassland. Therefore, the purple needle grass grassland is not a high-quality occurrence due to the abundance of nonnative annual grasses. Impacts on this community would be less than significant. No mitigation is required.

As stated in Section 3.3.2, *Environmental Setting*, no riparian communities or other sensitive natural communities were observed in the Cañada College Project area.

Impact CC-BIO-5: Impact native wildlife nursery sites (less than significant with mitigation)

Ground disturbance activities could result in direct or indirect mortality of nesting birds, including white-tailed kite, through crushing, parental abandonment of young, reduced fitness, reduction in number of available prey, and degradation or loss of habitat. Removal of trees or other vegetation could result in the destruction of active bird nests. With implementation of **Mitigation Measure CC-BIO-2**, impacts on active nests of native species protected by the MBTA and Section 3503 of the California Fish and Game Code would be less than significant.

Mitigation Measure CC-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at Cañada College

This mitigation is described under Impact CC-BIO-2**.**

College of San Mateo

With respect to the significance criteria above, there would be no impact on the following resources on the CSM campus. Thus, they are not discussed further with respect to potential impacts from facility improvements at CSM.

- Riparian Habitat/Sensitive Communities. No riparian communities or other sensitive natural communities were observed within the Project area on the CSM campus.
- Wetlands. No wetlands or other waters of the United States were observed on the potentially affected areas of the CSM campus.
- Migratory Fish or Wildlife. There are no known migratory routes for terrestrial wildlife through the Project area, and no aquatic habitat is present. Land cover types within the Project area are not significantly different from the surrounding landscape, excepting a high degree of landscaped/disturbed (including development) land cover that fragments undeveloped areas with natural vegetation. Therefore, construction of the Project is not expected to have an impact on any established migratory fish or wildlife routes.
- Local Policies. The District is exempt from local zoning ordinances. The Project's consistency with the related ordinances is discussed below in the discussion of Impact CSM-BIO-1.
- Habitat Conservation Plan. There are no existing or pending habitat conservation plans or natural community conservation plans that include the Project area.

Impact CSM-BIO-1: Impact special-status plant species (less than significant with mitigation)

Similar to the improvements at Cañada College, most improvements at CSM would take place on disturbed landscaped/disturbed land with limited potential for special-status plant species to exist. Special-status plant species have the potential to occur in undeveloped areas with suitable habitat, namely areas that support natural land cover. As noted in Section 3.3.2, *Environmental Setting*, such areas are limited at CSM. However, where suitable habitat occurs, Project activities could result in direct impacts (i.e., loss of individuals or colonies) and/or indirect (e.g., habitat modification resulting in increased competition from nonnative invasive plants) impacts on special-status plant species.

The campus eucalyptus trees are native to Australia and, therefore, are not special-status plants. Any eucalyptus trees that would be removed as part of the Project would be replaced on campus with suitable landscaping. Removal of eucalyptus, the dropped bark and leaves of which render the area beneath them unsuitable for other trees, would allow native trees to re-establish in the removal area over time. The eucalyptus trees on campus vary in size, but include large specimens that would meet the City of San Mateo's heritage tree ordinance's definition as "[a]ny other tree with a trunk diameter of sixteen (16) inches or more, measured at forty-eight (48) inches above natural grade." Therefore, the Project would be inconsistent with the heritage tree ordinance by not preserving these trees. With implementation of **Mitigation Measure CSM-BIO-1**, impacts on special-status plants on the CSM campus would be less than significant.

Mitigation Measure CSM-BIO-1: Implement special-status plant species avoidance and revegetation measures at the College of San Mateo

This mitigation is the same as Mitigation Measure CC-BIO-1 described under Impact CC-BIO-1, but would be implemented at the College of San Mateo.

Impact CSM-BIO-2: Impact special-status bird species (less than significant with mitigation)

Ground disturbance activities could result in direct or indirect mortality of nesting birds, including white-tailed kite, through crushing, parental abandonment of young, reduced fitness, reduction in number of available prey, and degradation or loss of habitat. Removal of trees or other vegetation could result in the destruction of active bird nests. Birds that nest on existing buildings within or near the Project area could be disturbed by the demolition of these structures (particularly Building 8, Gymnasium, Building 12, East Hall, and Building 19, Emerging Technologies) or by construction of Project elements. Other temporary impacts on nesting birds resulting from construction activities would include air pollution from dust and construction equipment and construction noise and vibration. With implementation of **Mitigation Measure CSM-BIO-2**, impacts on active nests of native species protected by the MBTA and Section 3503 of the California Fish and Game Code would be less than significant.

Mitigation Measure CSM-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at the College of San Mateo

This mitigation is the same as Mitigation Measure CC-BIO-2 described under Impact CC-BIO-2, but would be implemented at the College of San Mateo.

Impact CSM-BIO-3: Impact special-status bats (less than significant with mitigation)

Ground disturbance and vegetation removal activities at CSM could result in the direct or indirect mortality or injury of individual special-status bats belonging to special-status species through crushing, parental abandonment of young, reduced fitness, and degradation or loss of habitat. Where tree or other vegetation removal is necessary, the Project could disturb bat roosting habitat. Other temporary impacts on bat species resulting from construction activities would include air pollution from dust and construction equipment and construction noise and vibration. Although the potential to encounter special-status bat species is low, construction activities and related effects would still have potential to disturb habitat and individual fringed myotis, pallid bat, and hoary bat. With implementation of **Mitigation Measure CSM-BIO-3**, this impact would be less than significant.

Mitigation Measure CSM-BIO-3: Implement fringed myotis, pallid bat, and hoary bat avoidance measures at the College of San Mateo

This mitigation is the same as Mitigation Measure CC-BIO-3 described under Impact CC-BIO-3, but would be implemented at the College of San Mateo.

Impact CSM-BIO-4: Impact native wildlife nursery sites (less than significant with mitigation)

Ground disturbance activities could result in direct or indirect mortality of nesting birds, including white-tailed kite, through crushing, parental abandonment of young, reduced fitness, reduction in number of available prey, and degradation or loss of habitat. Removal of trees or other vegetation could result in the destruction of active bird nests. With implementation of **Mitigation Measure CSM-BIO-2**, impacts on active nests of native species protected by the MBTA and Section 3503 of the California Fish and Game Code would be less than significant.

Mitigation Measure CSM-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at the College of San Mateo

This measure is described under Impact CSM-BIO-2.

Skyline College

With respect to the significance criteria above, there would be no impact on the following resources on the Skyline College campus. Thus, they are not discussed further with respect to potential impacts from facility improvements at Skyline College.

- Wetlands. No wetlands or other waters of the United States were observed on the potentially affected areas of the Skyline College campus.
- Migratory Fish or Wildlife. There are no known migratory routes for terrestrial wildlife through the Project area, and no aquatic habitat is present. Land cover types within the Project area are not significantly different from the surrounding landscape, excepting a high degree of landscaped/disturbed (including development) land cover that fragments undeveloped areas with natural vegetation. Therefore, construction of the Project is not expected to have an impact on any established migratory fish or wildlife routes.
- Habitat Conservation Plan. There are no existing or pending habitat conservation plans or natural community conservation plans that include the Project area.

Impact SC-BIO-1: Impact special-status plant species (less than significant with mitigation)

Most improvements at Skyline College would take place on disturbed landscaped/disturbed land with limited potential for special-status plant species to exist. Special-status plant species have the potential to occur in undeveloped areas with suitable habitat, namely areas that support natural land cover. As noted in Section 3.3.2, *Environmental Setting*, such areas are limited at Skyline College. However, where suitable habitat occurs, Project activities could result in direct impacts (i.e., loss of individuals or colonies) and/or indirect (e.g., habitat modification resulting in increased competition from nonnative invasive plants) impacts on special-status plant species. With implementation of **Mitigation Measure SC-BIO-1**, impacts on special-status species on the Skyline College campus would be less than significant.

Mitigation Measure SC-BIO-1: Implement special-status plant species avoidance and revegetation measures at Skyline College

This mitigation is the same as Mitigation Measure CC-BIO-1 described under Impact CC-BIO-1, but would be implemented at Skyline College.

Impact SC-BIO-2: Impact special-status bird species (less than significant with mitigation)

Ground disturbance activities could result in direct or indirect mortality of nesting birds, including white-tailed kite, through crushing, parental abandonment of young, reduced fitness, reduction in number of available prey, and degradation or loss of habitat. Removal of trees or other vegetation could result in the destruction of active bird nests. Birds that nest on existing buildings within or near the Project area could be disturbed by the demolition of these structures or by construction of Project elements. Other temporary impacts on nesting birds resulting from construction activities would include air pollution from dust and construction equipment and construction noise and vibration. With implementation of **Mitigation Measure SC-BIO-2**, impacts on active nests of native species protected by the MBTA and Section 3503 of the California Fish and Game Code would be less than significant.

Mitigation Measure SC-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at Skyline College

This mitigation is the same as Mitigation Measure CC-BIO-2 described under Impact CC-BIO-2, but would be implemented at Skyline College.

Impact SC-BIO-3: Impact special-status bats (less than significant with mitigation)

Ground disturbance and vegetation removal activities at Skyline College could result in the direct or indirect mortality or injury of individual special-status bats belonging to special-status species through crushing, parental abandonment of young, reduced fitness, and degradation or loss of habitat. Where tree or other vegetation removal is necessary, the Project could disturb bat roosting habitat. Other temporary impacts on bat species resulting from construction activities would include air pollution from dust and construction equipment and construction noise and vibration. Although the potential to encounter special-status bat species is low, construction activities and related effects would still have potential to disturb habitat and individual fringed myotis, pallid bat, and hoary bat. With implementation of **Mitigation Measure SC-BIO-3**, this impact would be less than significant**.**

Mitigation Measure SC-BIO-3: Implement fringed myotis, pallid bat, and hoary bat avoidance measures at Skyline College

This mitigation is the same as Mitigation Measure CC-BIO-3 described under Impact CC-BIO-3, but would be implemented at Skyline College.

Impact SC-BIO-4: Impact Mission blue butterfly (less than significant with mitigation)

Construction of Building 12, Environmental Sciences on the Skyline College campus has the potential to impact Mission blue butterfly habitat through the removal of silver lupine (*Lupinus albifrons*) plants, which are larval and adult host plant habitat. Additionally, correspondence between the District and USFWS in 1995 discussing the results of Mission blue butterfly surveys conducted in 1993 and 1994 by Thomas Reid Associates documents the presence of Mission blue butterfly utilizing patches of *L. albifrons* west of the developed portions of the Skyline College Campus (Medlin pers. comm.). The removal of *L. albifrons* could result in direct impacts on Mission blue butterfly larva or eggs on or near the host plant and through the removal of habitat provided by the host plant, each representing a significant impact. Avoidance of Mission blue butterfly host plants would ensure that no take of the species would occur and ensure Project compliance with ESA. With implementation of **Mitigation Measures SC-BIO-4a, SC-BIO-4b,** and **SC-BIO-4c**, this impact would be less than significant.

Mitigation Measure SC-BIO-4a: Conduct presence–absence survey for Mission blue butterfly at Skyline College

The District will retain a qualified biologist with demonstrated field experience identifying Mission blue butterflies to survey the silver lupine stands in and adjacent to (i.e., within 100 feet of) the Project footprint at the western edge of Skyline College for the presence of Mission blue butterfly. The survey will consist of a minimum of four visits during the adult flight season (late March to early July), with at least 2 weeks between visits. Prior to initiating survey visits for a given year, the biologist will visit a nearby site where Mission blue butterflies are known to occur and/or coordinate with other local biologists to confirm that adults are detectable. Survey results will be considered valid for 1 year, after which additional surveys would be needed to demonstrate absence. Surveys will not be conducted during the following weather conditions.

- Fog, drizzle, or rain.
- Sustained or gusting winds averaging over 15 miles per hour (mph) measured over a 30-second period at a height of 4 to 6 feet above ground level.
- Temperature in the shade at ground level less than 60° F with less than 50% cloud cover, or less than 70° with 50% or more cloud cover.

Weather conditions will be recorded on site using appropriate instruments and will not be estimated or obtained from Internet websites.

If the survey(s) demonstrate Mission blue butterfly absence from the Project footprint and adjacent areas, no further mitigation will be required.

Mitigation Measure SC-BIO-4b: Avoid impacts on Mission blue butterfly habitat during construction of the Environmental Sciences building at Skyline College

If Mission blue butterflies are detected using silver lupine plants within or adjacent to the Project footprint, the District will retain a qualified biologist experienced in silver lupine identification to delineate observed stands of this plant with a global positioning system (GPS) unit capable of sub-meter accuracy near the proposed Building 12, Environmental Sciences in the western portion of Skyline College prior to the final design of the structure. The District, or a contractor operating under direction of the District, will use the GPS data to design the Environmental Sciences building and its placement on the site to avoid the delineated patches of silver lupine. The design will provide that neither construction activities (including site preparation, materials storage, and transport) nor the location of the building eliminate any areas of silver lupine.

Mitigation Measure SC-BIO-4c: Consult with the U.S. Fish and Wildlife Service if impacts on Mission blue butterfly habitat cannot be avoided

If Mission blue butterflies are detected during presence–absence surveys and avoidance of silver lupine is not feasible, the District will consult with the U.S. Fish and Wildlife Service (USFWS) regarding appropriate compensatory mitigation for the loss of habitat, including possible salvage and translocation of impacted plants. At a minimum, the District will replace any impacted habitat at a 2:1 ratio (i.e., square feet of silver lupine planted or translocated: square feet of silver lupine permanently impacted by construction).

If translocation of impacted plants is approved as a component of compensatory mitigation, the District or third-party contractor must prepare a USFWS-approved salvage and transplantation plan that includes the following components, at a minimum.

- Plants will be moved during the dormant season to minimize impacts on individuals.
- Some topsoil from the impact site will also be moved to the transplant site to introduce soil microorganisms.
- The plan will have a detailed description of the transplantation receptor site (including soil type, soil moisture, topography, hydrology, presence or absence of typical associated plant species, site accessibility) and provide rationale for expected planting success.

Impact SC-BIO-5: Impact California red-legged frog (less than significant with mitigation)

California red-legged frog is known to occur in a drainage immediately west of the Skyline College campus and downslope of the proposed Building 12, Environmental Sciences site. Construction of this Project component could result in erosion of the soil within the Project area and sediment deposition in California red-legged frog habitat at the base of the hill, ultimately affecting individual California red-legged frogs and/or their habitat. Such an effect would be a significant impact which could be mitigated with water quality protection measures identified in Section 3.8, *Hydrology and Water Quality*. With implementation of **Mitigation Measures SC-HYD-1** and **SC-HYD-2**, impacts would be less than significant.

Mitigation Measure SC-HYD-1. Implement erosion-control measures to protect water quality during construction at Skyline College

This measure is described under Impact CC-HYD-1 in Section 3.8, *Hydrology and Water Quality,* but would be implemented at Skyline College.

Mitigation Measure SC-HYD-2. Design and maintenance of hydromodification features as postconstruction measures at Skyline College

This measure is described under Impact CC-HYD-1 Section 3.8, *Hydrology and Water Quality*, but would be implemented at Skyline College.

Impact SC-BIO-6: Impact riparian habitat or other sensitive natural communities (less than significant)

As discussed in the Environmental Setting, no riparian communities were observed on the Skyline College campus. Two sensitive natural communities, Monterey cypress stands and Monterey pine forest, were identified on the campus. However, both species have been widely planted as ornamental trees throughout the San Francisco Bay Area, and the "sensitive natural community" designation refers to the few remaining naturally occurring stands on the Monterey peninsula. In all likelihood, these are ornamental plantings, not native remnant stands, and are of uncertain genetic origin. Therefore, the Monterey cypress stands and Monterey pine forest at Skyline College are not considered sensitive natural communities. The impact of removing the Monterey cypress trees from the stands on campus would be less than significant. No mitigation is required.

Clearings within the Monterey pine forest near the overlook (west of Parking Lots F and G) contain silver lupine (*Lupinus albifrons*) and, therefore, provide habitat for Mission blue butterfly. Impacts on the butterfly habitat are discussed under Impact SC-BIO-4.

Impact SC-BIO-7: Impact native wildlife nursery sites (less than significant with mitigation)

Ground disturbance activities could result in direct or indirect mortality of nesting birds, including white-tailed kite, through crushing, parental abandonment of young, reduced fitness, reduction in number of available prey, and degradation or loss of habitat. Removal of trees or other vegetation could result in the destruction of active bird nests. With implementation of **Mitigation Measure SC-BIO-2**, impacts on active nests of native species protected by the MBTA and Section 3503 of the California Fish and Game Code would be less than significant.

Mitigation Measure SC-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at Skyline College

This measure is described under Impact SC-BIO-2.

Impact SC-BIO-8: Potentially conflict with the City of San Bruno's heritage tree ordinance (less than significant with mitigation)

The District's educational buildings and related facilities are exempt from local planning policies and ordinances. However, construction activities associated with the future residential complex on Surplus Parcel B would be subject to the City of San Bruno's Municipal Code and could, thus, result in the disturbance or loss of individual heritage trees or protected trees as defined by the City of San Bruno (refer to Section 3.3.1, *Regulatory Setting*), which would be a significant impact. Because trees

were observed on the site but not identified, it is possible that they could be considered heritage trees subject to the City's tree ordinance. With implementation of **Mitigation Measure SC-BIO-5**, this impact would be less than significant.

Mitigation Measure SC-BIO-5: Implement tree avoidance, minimization, and replacement plan at the residential development site at Skyline College

The definition of *heritage tree* for the purposes of this mitigation will be the same definition used in Chapter 8.25 of the City of San Bruno (City) Municipal Code. If there are heritage trees on the residential development site (Surplus Parcel B) that would be removed or pruned in conjunction with the development, then prior to ground disturbance, the District will apply for and receive a heritage tree removal permit from the City. The District will comply with the conditions of that permit.

Tree Survey—Prior to ground disturbance, the District or its representative will hire a certified arborist for the purpose of surveying Surplus Parcel B to identity any trees that would qualify as heritage trees under Chapter 8.25 of the City's municipal code. The arborist will prepare a report describing the existing trees on the site and whether any qualify as heritage trees requiring a permit from the City for their removal or pruning.

Site Plan—If there are qualifying heritage trees, then the arborist will prepare a site plan that accurately indicates the location, species, tree dripline, and trunk circumference of all qualifying trees whose tree trunks lie within 50 feet (15.2 meters) of proposed Project activities, or other proposed development activity (e.g., staging areas, stockpiling of construction materials, fill, etc.). The site plan will include any qualifying trees whose trunks lie on adjoining property but whose canopies (driplines) extends onto the Project site if any pruning of those trees is to be undertaken as part of the development of Surplus Parcel B. The site plan will indicate which individual trees are proposed to be (1) removed, (2) pruned in conjunction with the residential Project, or (3) protected by exclusion fencing at the dripline or as prescribed by the arborist. The plan will contain a tally of the total number of trees proposed to be removed and their respective tree circumferences. If the City has previously designated one or more trees on the site or an adjoining site as a Heritage Tree(s), then those trees will be so labeled on the site plan.

Heritage Tree Removal Permit Information—In order to inform the removal permit application, the arborist's report will include the following information about the affected heritage trees.

- The condition of the tree or trees with respect to disease, danger of falling, proximity to existing or proposed structures and interference with utility services.
- The necessity to remove the tree or trees in order to construct any proposed improvements to allow reasonable economic enjoyment of the property.
- The topography of the land and the effect of the removal of the tree on erosion, soil retention, and diversion or increased flow of surface waters.
- The number of trees existing in the neighborhood on improved property and the effect the removal would have on the established standard of the area and property values.

- The number of trees the particular parcel can adequately support according to good arboricultural practices.
- Photographs of the tree(s) proposed to be affected.

No Qualifying Trees on Site—If the site contains no trees that meet Chapter 8.25 definitions, this will be indicated on the site plan.

3.3.3.4 Cumulative Impacts

Project activities have potential to affect special-status species and trees, but these impacts would be less than significant with the implementation of the mitigation measures discussed in Section 3.3.3.3, *Impacts and Mitigation Measures*. The determination that a plant or wildlife species deserves special status is based on a review of the species population and distribution across its habitat at a regional or statewide level. Assigning a species special status indicates that it is being adversely affected. A threatened, endangered, or candidate species is afforded a higher level of protection under ESA, indicating that the species is subject to a significant cumulative impact. A significant Project impact on such species would constitute a considerable contribution to a cumulative impact.

The Project, as mitigated, would not make a considerable contribution to significant cumulative impacts on any threatened, endangered, or candidate species. Similarly, the mitigation measures avoid a cumulative contribution to adverse effects on other special status species.

Other projects in the region have the potential to contribute to cumulative impacts on special-status species and trees, but each is expected to implement its own mitigation to avoid or offset such effects, thereby minimizing contributions from those sources to reasonably probable future impacts. Given the limited size of the new facilities in light of the existing size of the campuses and of the residential development at Skyline College in light of the surrounding urbanized area, the Project is not expected to significantly contribute to the regional impacts on special-status species and trees.

3.4 Cultural Resources

This section describes the regulatory and environmental setting for cultural resources. It also describes impacts on cultural resources that would result from implementation of the Project and mitigation for significant impacts where feasible and appropriate.

3.4.1 Regulatory Setting

The following regulations are relevant to cultural resources and apply to implementation of the Project on all three campuses, unless otherwise specified.

3.4.1.1 Federal

National Historic Preservation Act

Federal regulations for cultural resources are primarily governed by Section 106 of the National Historic Preservation Act (NHPA) of 1966, which applies to actions taken by federal agencies. The goal of the Section 106 review process is to offer a measure of protection to sites that are determined eligible for listing in the National Register of Historic Places (NRHP). The criteria for determining NRHP eligibility are found in 36 Code of Federal Regulations (CFR) Part 60. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and affords the federal Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings. The council's implementing regulations, "Protection of Historic Properties," are found in 36 CFR Part 800. The NRHP criteria (contained in 36 CFR 60.4) are used to evaluate resources when complying with NHPA Section 106. Those criteria state that eligible resources comprise districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

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

b. are associated with the lives of persons significant in our past;

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

d. have yielded or may be likely to yield, information important to history or prehistory.

3.4.1.2 State

California Public Resources Code

Under CEQA, public agencies must consider the effects of their actions on both historical resources and unique archaeological resources. Pursuant to Public Resources Code (PRC) Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment."

Historical resource is a term with a defined statutory meaning (refer to PRC Section 21084.1 and State CEQA Guidelines Section 15064.5 [a] and [b]). The term embraces any resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR). The CRHR criteria and guidelines are modeled after NRHP. The CRHR includes resources listed in or formally determined eligible for listing in the NRHP, as well as some California State Landmarks and Points of Historical Interest. The CRHR guideline for considering a resource's eligibility for listing as historically significant is 50 years, modeled after the NRHP. As in the NRHP, significant historical resources over 50 years of age can be listed on the CRHR when they meet the eligibility criteria. However, properties under 50 years of age that are of exceptional significance or are contributors to a historic district can also be included on the CRHR. The primary difference between the NRHP and the CRHR is in the interpretation of historic integrity and the special considerations and criteria considerations of the two registries. CRHR eligibility considerations follow guidance in Public Resources Code 5024(b) and application of National Register Bulletin No. 15 guidance, as instructed by the California Office of Historic Preservation for interpreting CRHR criteria.

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 a preponderance of evidence indicates otherwise (PRC Section 5024.1; California Code of Regulations (CCR), Title 14, Section 4850). Unless a resource listed in a survey has been demolished, lost substantial integrity, or there is a preponderance of evidence indicating that it is otherwise not eligible for listing, a lead agency should consider the resource to be potentially eligible for the CRHR.

In addition to assessing whether historical resources potentially affected by a proposed project are listed or have been identified in a survey process, lead agencies have a responsibility to evaluate them against the CRHR criteria prior to making a finding as to a proposed project's impacts on historical resources (PRC Section 21084.1; State CEQA Guidelines Section 15064.5 (a)(3)). In general, a *historical resource*, under this approach, is defined as any object, building, structure, site, area, place, record, or manuscript that:

a. is historically or archeologically significant; or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political or cultural annals of California; and

b. meets any of the following criteria:

   Criterion 1: Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

   Criterion 2: Is associated with the lives of persons important in our past;

   Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

   Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history.

As noted above, CEQA also requires lead agencies to consider whether projects will impact unique archaeological resources. Although CEQA does not define a unique paleontological resource or site, PRC Section 21083.2 (g) states that *unique archaeological resource* means 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" (PRC Section 21083.2 (g)).

With only slight modification, this definition is equally applicable to recognizing a *unique paleontological resource* or site. Paleontological resources are evaluated in Section 3.5, *Geology, Soils, and Paleontology*. Additional guidance is provided in the State CEQA Guidelines Section 15064.5 (a)(3)(D), which indicates "generally, a resource shall be considered historically significant if it has yielded, or may be likely to yield, information important in prehistory or history."

Under PRC Section 21083.2, options on how to treat such resources include activities that preserve the resources in place in an undisturbed state. Other acceptable methods of mitigation under PRC Section 21083.2 include excavation and curation or study in place without excavation and curation (if the study finds that the artifacts would not meet one or more of the criteria for defining a unique archaeological resource).

Section 7050.5 (b) of the California Health and Safety Code specifies protocol when human remains are discovered. The code states:

> In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.

State CEQA Guidelines Section 15064.5(e) requires that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the NAHC must be contacted within 24 hours. At that time, the lead agency is required to consult with the appropriate Native Americans as identified by the NAHC and direct the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

3.4.1.3 Local

As stated in Section 2.6 of Chapter 2, *Project Description*, the District is exempt from the application of city and county zoning ordinances, except the proposed residential complex at Skyline College because it is a non-educational use. However, the current zoning and applicable general plan provisions for each campus are provided for informational purposes.

Redwood City General Plan

The following goal and policies from the Redwood City General Plan (Redwood City 2010) are related to cultural resources and relevant to the Project.

Goal BE-36. Identify, study, and document historic resources.

Policy BE-36.1. Develop a detailed strategy for ongoing survey and identification of historic resources.

Policy BE-36.2. Develop citywide narrative context for historic resources.

Policy BE-36.3. Continue to maintain the Historic Resources Inventory in a digital format that can be easily updated and tracked.

Town of Woodside General Plan

The following goal and policies from the Town of Woodside General Plan 2012 (Town of Woodside 2012) are related to cultural resources and are relevant to the Project.

Goal HP1. Protect historically and archaeologically significant structures, sites, and artifacts.

Policy HP1.1. Protect historic and archaeological resources: ensure adequate protection of historic and archaeological resources.

San Mateo General Plan

The following goal and policies from the San Mateo 2030 General Plan (City of San Mateo 2010) are related to cultural resources and are relevant to the Project.

Goal 3. Protect heritage trees and human-made elements of the urban environment which reflect the City's history and contribute to the quality of life.

Policy C/OS 7.1. Preserve, to the maximum extent feasible, archaeological sites with significant cultural, historical, or sociological merit.

Policy C/OS 8.1. Preserve, where possible, historic buildings by prohibiting the demolition of historic buildings until a building permit is authorized subject to approval of a planning application.

Policy C/OS 8.2. Historic Districts: Consider the protection of buildings which convey the flavor of local historical periods or provide an atmosphere of exceptional architectural interest or integrity, after additional study.

San Bruno General Plan

The following goal and policies from the San Bruno General Plan (City of San Bruno 2009) are related to cultural resources and are relevant to the Project.

Goal ERC-F. Preserve and enhance historic and cultural resources within the city, particularly within the historic Downtown area.

Policy ERC-39. Continue to protect archaeological sites and resources from damage. Require that areas found to contain significant indigenous artifacts be examined by a qualified archaeologist for recommendations concerning protection and preservation.

Policy ERC-40. Ensure that new development adjacent to historic structures is compatible with the character of the structures and the surrounding neighborhood.

Policy ERC-42. If demolition of a historical building is necessary for safety reasons, attempt to preserve the building façade for adaptive reuse during reconstruction.

3.4.2 Environmental Setting

3.4.2.1 Regional Conditions

The regional conditions for cultural resources consist of the prehistoric, ethnographic, geoarchaeological, and historical contexts of San Mateo County, including the three campuses and surrounding lands. A summary of the regional conditions, based on previous reports and other secondary sources, is presented in **Appendix D**, *Cultural Resources Background Information and Documentation*.

3.4.2.2 San Mateo County Community College District

Overview

The history of the District dates back to the early 1920s, when local educator William L. Glascock began to promote the idea of a junior college to San Mateo business leaders. Glascock presented the junior college as an affordable option to traditional four-year institutions, which had become increasingly expensive and overcrowded during the 1920s. While Glascock saw the college as a way to provide education to thousands of students, local real estate entrepreneurs and businessmen expressed enthusiasm for the school's potential to increase real estate values in City of San Mateo (San Mateo Times 1995).

There was widespread community support for the development of a junior college, and voters approved the establishment of the college by a substantial margin in March 1922. The college officially opened on August 28, 1922, in several rooms of the San Mateo High School at Baldwin Avenue in the City of San Mateo. These modest accommodations served the college's first student body in 1922, which consisted of only 30 students. Early students would often transfer from the junior college to Stanford University or the University of California, Berkeley, once they completed the necessary coursework (San Mateo Times 1995).

After only a year in operation, San Mateo Junior College relocated to the more spacious grounds of the 16-acre Captain William Kohl estate located in the heart of the City of San Mateo. Although the mansion on the estate had been refashioned and enlarged to provide classrooms for the growing student body, the lack of facilities and small overall size of the school proved inadequate for the burgeoning student population. In 1927, the school moved back to its original location at San Mateo High School on Baldwin Avenue, which was by then unoccupied, due to the fact that the high school had recently moved to a new campus on North Delaware Street. Although the college now exclusively occupied the Baldwin Avenue site, the booming student population would again outgrow the size of the antiquated campus. Overcrowding in classrooms was commonplace during the 1930s, and due to the onset of the Great Depression, there was little funding to alleviate the issue (Svanevik 1996:13–17, 35–36).

The struggle to find an adequate, permanent location for the junior college continued well into the post-World War II period. With a skyrocketing student body following World War II, the college leased extra space at the old U.S. Merchant Marine Academy buildings at Coyote Point. It also opened a science building on Delaware Avenue in 1947, in addition to maintaining its campus on Baldwin Avenue. In 1954, students voted to change the name of the school from San Mateo Junior College to College of San Mateo (CSM) (San Mateo Times 1996).

The movement to build a permanent, modern, and consolidated campus for CSM would languish until 1956, when the District Board of Trustees hired Dr. Julio L. Bortolazzo as president and superintendent of the college. Bortolazzo was a strong advocate of expanding secondary educational opportunities to all citizens and is widely considered a pioneer in the development of California community colleges. A tireless advocate for the new campus, Bortolazzo quickly formed a blue ribbon committee, which identified a potential site for the college in the hills overlooking San Mateo in an area to be known as "College Heights." At the committee's suggestion, the District Board of Trustees, headed by Bortolazzo, adopted a 25-year Master Plan for the District. The new college campus was heavily promoted by Bortolazzo at public speaking engagements around the community. The success of such public relations was evident on October 15, 1957, when San Mateo County voters approved a substantial $5.9 million dollar bond for the creation of a campus at the College Heights location. The college was set to occupy 153 acres of hilly ranch land once owned by building contractor L.C. Smith and noted for its magnificent views of the San Francisco Bay and the preserved oak and chaparral habitat of the Crystal Springs Reservoir watershed. (San Mateo 1963).

By the late 1960s, the District took a major step toward expansion with the completion of the new Cañada College in the town of Woodside in 1968 and Skyline College in San Bruno in 1969. Both of these campuses were championed by Bortolazzo (Svanevik 1996:84–95).

College of San Mateo

This section focuses on CSM because it is the only campus over 50 years of age, the age when properties are considered as potential historic resources following the criteria for consideration of CRHR eligibility. CSM includes buildings designed by renowned architect John Carl Warnecke, and was previously determined eligible for listing on the NRHP and CRHR.

Development of Original College of San Mateo Campus

The Board of Trustees commissioned architect John Carl Warnecke to design the new CSM campus at College Heights. Regarded as a leading modern architect of his time, Warnecke took inspiration for the new campus from the Frank Lloyd Wright's 1930-era design for Florida Southern College. Warnecke's internationally recognized works include the U.S. Embassy in Bangkok, the state capital of Hawaii, eight buildings at the University of California, and a restoration of Lafayette Square in Washington, D.C. (Svanevik 1996:73–74). Refer to the discussion under *Architect History: John Carl Warnecke*.

A groundbreaking ceremony was held for the new college on October 21, 1960. Both Bortolazzo and Warnecke aimed to design a campus that reflected the dignified feel and grandeur of a university, rather than the modest architecture that had been previously associated with junior colleges. Despite some construction delays and issues with parking, the new campus was warmly received by both critics and the public upon the new campus's official dedication on December 8, 1963 (Svanevik 1996:75–77; The San Matean 1963).

The new campus included new buildings of concrete, glass, and steel construction. Besides classrooms, the campus also boasted a new theater, library, planetarium, horticultural center, and a T.V. station. The buildings were connected by arcades and placed along two circulation malls. Warnecke employed a Neo-Formalist architectural design for these buildings, which were highly regarded for their simple yet graceful appearance. The Neo-Formalist style was defined in its combination of classical design concepts, such as the use of columns and entablatures and the placement of building along formal axes to one another in the landscape. Unlike Neo-Classicism, however, Neo-Formalism rejects historicism, employing instead new materials and technologies typically seen in Modernist architecture (Svanevik 1996:77–78).

Generally two stories high, the buildings were distinguished by expansive window treatments that were fronted by narrow concrete columns. An approximately 49,000-square-foot library served as the center piece of the campus, featured in a prominent location, and characterized by a façade with floor-to-ceiling gray glass window treatments and pierced-masonry screening. The library contained space for approximately 65,000 books, an FM public radio station, a television station, and the largest audio facility in the state of California (Svanevik 1996: 79).

The Fine and Performing Arts Center building (now called the Theater building and referred to as the Fine Arts Complex for the purposes of the current study), located just southwest of the library, was another monumental building on campus done by Warnecke in the Neo-Formalist style. Two stories high, the building contained a main theater entrance as well as two flanking wings. Arched, floor-to-ceiling windows stretch across all façades of the building. Like the Library building, the Fine and Performing Arts Center was fronted by a trapezoidal pool with fountains which were redesigned by 2010. The pools were framed by rows of freestanding arcaded pergolas or collonades which helped form a plaza (Historic Resource Associates 2011).

Other facilities on the new campus included an approximately 56,000-square-foot gymnasium and athletic fields built on terraced hillsides. This included a football stadium that seated approximately 4,300 people and had an all-weather track, eight tennis courts, two pools, and eight outdoor basketball courts. The campus design was also noted at the time for its inventive use of landscaping, which included ice plant covered hillsides and mature olive trees that were planted throughout the campus. Many of these landscape features, including the olive trees, were removed and the landscape redesigned by 2010 (Svanevik 1996:80).

Architect History: John Carl Warnecke

John Carl Warnecke (1919–2010) was born in Oakland, California to German-born, Carl I. Warnecke, a prominent San Francisco architect known for his Beaux Arts civic and commercial buildings and Tudor style residences, and to Margret Esterling Warnecke of Guerneville, California. Warnecke's earliest architectural influences came from his architect father who studied at the Ecole de Beaux-Arts in Paris. The junior Warnecke studied art and architecture at Stanford University in Palo Alto and graduated in 1941. He studied under preeminent modernist architect Walter Gropius while attending Harvard University's Graduate School of Design in Cambridge, Massachusetts and met fellow Harvard student and future president John F. Kennedy. He completed his 3-year graduate courses in a single year and graduated in 1942.

After graduating from the architecture program at Harvard, Warnecke returned to the Bay Area and worked initially as a building inspector in Richmond, and later as a draftsman for his father's architectural firm. Warnecke worked in his father's architectural firm from 1943 to 1947 (PCAD 2015; Docomomo Noca 2014). During this time he became interested in the works of progressive

local architects such as Bernard Maybeck and William Wurster, founder of the University of California's (UC) Berkeley College of Environmental Design that brought the departments of architecture, landscape architecture, and planning into one organization.

In 1950, Warnecke opened his own firm and began to emphasize the use of Modern concepts. He was an early proponent of the design philosophy known as contextualism, which seeks to harmonize building designs with their physical, cultural, and historical settings. One of Warnecke's most successful examples of the application of contextualism is the 1962 Lafayette Square project in Washington, D.C. Warnecke worked with First Lady Jacqueline Kennedy to save the existing historical buildings around the square from demolition and then incorporated them into his re-conceptualized plan for the square, which included the construction of Modern-influenced buildings (PCAD 2015; Docomomo Noca 2014). Warnecke received commissions for numerous federal projects throughout the United States, including the Kennedy memorial site in Arlington, Virginia, at the behest of the widowed First Lady.

Warnecke received national recognition for his design of the Mira Vista Elementary School in east Richmond Heights, California in 1951. Following this, he and his firm designed other schools in the San Francisco Bay Area, bringing further fame. Warnecke reorganized his firm in 1958 under the name John Carl Warnecke & Associates, and by the early 1960s he was being commonly referred to in the press as "one of America's leading architects." Although Warnecke's commissions with the Kennedy family and throughout the United States kept him busy during the 1960s, he was personally active with San Francisco Bay Area projects such as the Market Street Redevelopment Project, multiple buildings at Stanford University including the Post Office and Bookstore (1960), the J. Henry Memorial Library (1966), and the Nathan Cummings Art Building (1969) as well as buildings for the UC Berkeley, all designed in the Modernist style and employing the architectural theory of contextualism. Warnecke was the master architect for the UC Santa Cruz campus, which opened in 1965. The campus was praised as one of his most successful modern university campus plans, seamlessly employing contextualist theory to the Santa Cruz campus' hillside landscape, laced with redwood groves (PCAD 2015; Docomomo Noca 2014; Svanevik 1996: 73-74; Brown 2010).

Warnecke commenced work on the plans for CSM in 1957, working closely with Board President Bortolazzo with a goal to create a progressive and dignified design for the junior college campus to be more like a university. The groundbreaking ceremony for the college took place in October 1960. The campus opened three years later, in fall 1963, delayed in part due to the unexpected sub-soil conditions and disagreements between college officials and contractors. He designed the buildings on the CSM campus using concepts from a popular architectural movement of the 1960s, Neo-Formalism. Master proponents of the Neo-Formalist style at the time were Minoru Yamasaki, Philip Johnson, and Edward Durell Stone. The CSM campus buildings designed by Warnecke bear a striking resemblance to the Neo-Formalist buildings at Wayne State University in Detroit, Michigan designed by Yamasaki in 1958. The buildings feature glass walls, concrete columns and arcades, and cantilevered sawtooth roofs. Proponents of Neo-Formalism fused classically inspired design motifs such as Gothic, Classical, and Exotic styles while maintaining such Modern attributes as symmetry, enclosed form, movement, and relationship of the structure to its landscape (Docomomo Noca 2014; Svanevik 1996:74; Michigan Modern 2015; Koeper and Whiffen 1984:384–385).

By the 1970s, John Carl Warnecke & Associates had become one of the largest architectural firms in the United States, with six offices across the country. During the 1960s and 1970s, Warnecke gained international recognition with his works for the U.S. Embassy in Bangkok and the Hawaii state capital building. Warnecke had an innate ability to attract and assemble talented staff who would go

on to become master architects in their own right, such as A. Eugene Kohn, William Pedersen, and Sheldon Fox in his New York office, who would later establish the globally active Kohn Pedersen Fox architectural firm. Warnecke downsized his firm in the 1980s as he approached retirement, not wanting his firm to remain after his death. Warnecke died of pancreatic cancer in his home in Healdsburg, California in April 1970 at the age of 91, leaving behind a prolific modernist legacy in the Bay Area, the United States and internationally (PCAD 2015; Storrow Kinsella Partnership, Inc. 2001).

Renovations at College of San Mateo Campus

During the 1960s, the campus experienced a changing social environment influenced by the civil rights movement, opposition to the Vietnam War, environmentalism, feminism, and other social issues largely driven by youth cultural and academic communities. The school became a popular location for debates, protests, and hosted a number of prominent speakers.

After the 1989 Loma Prieta earthquake, it was determined that many buildings at CSM did not meet the newly revised state codes for earthquake safety. Buildings, like the Library, were retrofitted in the mid-1990s to meet updated seismic safety standards. The most drastic change to the original 1964 design came in the 2000s, after two bond measures gained voter approval for the modernization and repair of all three community colleges in the District.

Renovations to the CSM campus occurred in 2002, 2005, and 2010 with the construction of a new Planetarium, Science building, an Allied Health and Wellness/Aquatics Center, and additional classroom buildings. Buildings at the northwest end of campuses were demolished, and parking lots were expanded. Pathways were altered to comply with the Americans with Disabilities Act, while new landscape plantings and new lawns were added. In the process, a number of Warnecke's original landscape design features and buildings were either demolished or completely reconfigured. For example, his broad rectilinear reflecting pools with fountains were demolished and replaced with redesigned, narrower reflecting pools. A circular, sunken meeting place apparently designed for small gatherings or outdoor class meetings was also removed and replaced with a paved area with picnic benches (Svanevik 1996:122; College of San Mateo 2014).

Site Description of Current College of San Mateo Campus

CSM is located on a hilltop in the City of San Mateo commanding expansive viewsheds. The campus is visually separated from most adjacent land uses by its steep topography and mature vegetation and consists of approximately 150 acres of hilly terrain. The City of Hillsborough to the north and west is visible from the north edge of campus. The CSM campus is developed with classroom and operation buildings, paved parking lots and roads, landscaped areas, pedestrian walkways, athletic facilities, faculty housing, and the District office. The landscaping consists of original design plan features as well as recently added and redesigned elements. The campus also includes undeveloped land.

CSM, formerly known as College Heights, originally consisted of 27 buildings, nearly all designed in the Neo-Formalist style of modernist architecture. The campus property is mostly T-shaped with the main classroom and operation buildings configured along the rectangular pathway set in a northwest and southeast direction at the center of campus. This central portion of the campus is made of two separate malls. The southern end contains the original campus buildings consisting of the Library, the Fine Arts Complex, the Administration building and the Gymnasium; along with the newly constructed Health and Wellness Center and the reconstructed courtyard and pools. The visual focus of the

northern campus mall is around the recently constructed College Center building and the other classroom and operation buildings configured on either side of the central pathway. The northern section of the campus consists of the original campus classroom and faculty Buildings 12, 14-19, the horticulture and green house buildings, and the newly constructed College Center, science buildings, and planetarium. The northeast end of the campus contains the athletic fields and related utilitarian buildings, Child Development Center, the Fire Technology building and the Public Safety Center. The southwestern end of the campus consists primarily of parking lots, the District office with faculty and staff housing at the southern end. The northwestern end of the campus consists of parking lots.

Table 3.4-1 lists the buildings on the CSM campus.

Table 3.4-1. College of San Mateo Campus Buildings

Building #	Name	Built Date	Building #	Name	Built Date
1	Administration	1963	17	Faculty Offices	1965
2-4, 4A	Fine Arts Complex: Music, Theater, Art	1963	18	North Hall	1965
4A	Ceramics	1975	19	Emerging Technologies	1963
5	Health and Wellness	2010	20	Horticulture	1963
7	Facilities	1963	30	Team House	1966
8	Gymnasium	1963	33	Child Development Center	1981
9	Library	1963	34	Fire Technology, ITS, Shipping and Receiving	1995
10	College Center	2000	35	Public Safety Center	2006
12	East Hall	1963	36	Science Building and Planetarium	2006
14	South Hall	1963	--	Greenhouse	1963
15	Faculty Offices	1963	--	District Office	1978
16	Central Hall	1963	--	College Vista	2004

Warnecke Designed Campus

The extant buildings on the CSM campus from John Carl Warnecke's design plan consist of the Administration building (Building 1), the Fine Arts Complex (Buildings 2–4), the Library (Building 9), Gymnasium (Building 8), the classroom and faculty Buildings 12, 14–19, and the former Horticulture building (Building 20)and Greenhouse. These Modernist buildings were designed in the Neo-Formalist style of architecture and are one or two-story structural concrete buildings with a symmetrical composition. They are capped by flat cantilevered roofs featuring precast concrete units of folded plates in a hyperbolic paraboloid design connected by concrete columns. The hyperbolic paraboloid is repeated in the multiple covered colonnades and walkways throughout the campus. Typical fenestration consists of aluminum-frame tempered glass windows and doors, with tall fixed windows above pivoted sashes and folded concrete spandrel panels. These glass walls meet at an apex at the roof created by the folded plate design with each glass bay separated by the structural concrete columns. Main entry doors are typically double or single entry glass and secondary doors are flush wood panels. The folded plate roofline is visibly carried into the interior

of the buildings. The following is a detailed description of the Warnecke designed buildings on the CSM campus (a photographic record of the CSM campus from the current survey as well as historic photographs of the buildings described below are included in **Appendix D**).

Fine Arts Complex

The Fine Arts Complex (Buildings 2-4) is U-shaped and consists of three attached buildings; the central theater building is flanked by the art and music wings. The central theater building extends out from the art and music buildings at the southern façade facing the parking lot. The two wings are connected at the east elevation fronting the central courtyard and pools by a two-story hyperbolic paraboloid colonnade containing stairs and a walkway leading to the second stories of the art and music wing. An open stepped courtyard, used as an outdoor stage or play arena, is contained in the space created by the wings and colonnade. The end façades of the art and music buildings with the narrow bays consist of concrete walls sheathed in textured concrete and the façades along the wider elevations consist of a glass wall motif. The interior of the theater building features the exposed hyperbolic paraboloid roofline, the original diamond-shaped drop lights, and curved wood screen on the wall separating the stage. Building 4A houses a small ceramics lab, constructed in 1975, and is located adjacent to the south elevation of the theater building.

Library

The Library (Building 9) is rectangular in plan and 6 bays wide by 11 bays deep. It features the hyperbolic paraboloid roofline seen throughout the campus. The three-story building is set on concrete base and footings and elevated above a basement story reached by the flight of stairs at the main entrance facing the central courtyard and pools. The façades feature full-story glass windows separated by columns supporting the folded plate roofline. A unique feature of this building is the decorative concrete screen walls fronting the glass bays which appear disjointed from the building, defusing direct sunlight through the large windows.

Administration Building

The Administration building (Building 1) is square-shaped, six bays wide by eight bays deep, and features a concrete hyperbolic paraboloid roofline joined by simple two-story structural columns. The four façades are identical and consist of two-story, aluminum-frame glass windows separated by folded concrete spandrel panels. The central entrance bays do not have the spandrel panel band.

Gymnasium

The Gymnasium (Building 8) is rectangular shaped and 7 bays wide by 11 bays deep with the folded concrete plate roofline. The building is three stories and constructed on a hill with the south elevation on the slopping hill side. The three central bays of each façade feature the typical full-height glass wall recessed into an entry pavilion with full-height columns flanked by wall panels with concrete siding between the structural columns.

Buildings 12 and 19

Buildings 12 and 19 sit together forming an L-shape with the north sides of the buildings on a north sloping hill. The north elevations of the buildings are two-stories and the south elevations are one-story to accommodate the hill. The two-story façades feature a typical glass and concrete wall and the one-story southwest façades are concrete walls with a central glass entry. The buildings are capped by the thematic hyperbolic paraboloid roof design.

Buildings 14 to 18

Buildings 14 to 18 are placed together and form a visually connected set. Each building is two-stories, rectangular-shaped and features glass curtain walls at the wider elevations and concrete walls at the narrower elevations. They are capped by two wide sets of the concrete hyperbolic paraboloid roof slabs which meet at the narrow elevations leaving one bay space for the glass wall and entrance. The narrower façades of Buildings 14, 16 and 18 are fronted by two-story concrete stairwells with an abstract concrete wall. One-story colonnades with folded plate roofs shelter a walkway between Buildings 14 and 16 and another between Buildings 16 and 18. Buildings 15 and 17 are one-story and recessed behind the colonnade, visually creating multiple stepped rooflines. Building 15 and 17 house faculty offices and are U-shaped with a rectangular shaped atrium in the center. Because the faculty office buildings are not clearly visible, their design is subdued and does not feature the hyperbolic paraboloid roofline and glass wall motif typically found on the other Warnecke-designed buildings.

Horticulture Building

The Horticulture building (Building 20) housed horticulture classes and is situated between Buildings 12 and 19 at the foot of the north slopping hill. The building is low and one-story with a flat roof with wide concrete eaves and exposed structural columns. The building's plan is in a Greek cross-shaped plan of equal end lengths with a square atrium in the center. The walls are concrete and terminate at the roofline with a narrow row of aluminum-frame glass windows. The side-facing gable greenhouse buildings are to the southeast of the former horticulture building and are also an original feature of the Warnecke design.

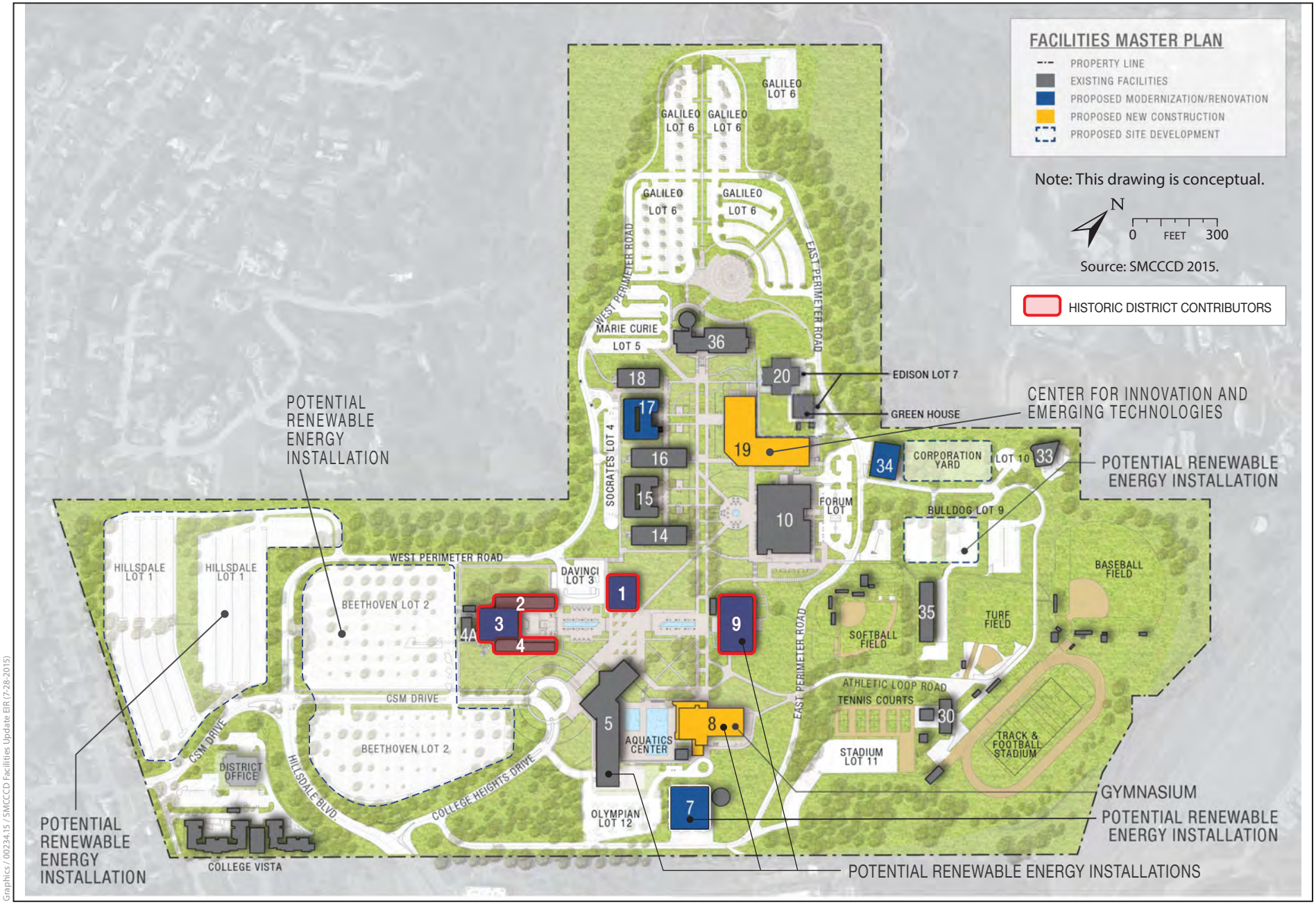
Historical Significance

California Register of Historic Resources Criteria

The CSM campus was evaluated under the CRHR Criteria 1–4.

The Fine Arts Complex was previously recorded and evaluated for eligibility for listing in the NRHP in 2011 by Historic Resource Associates (refer to **Appendix D** for the previous DPR form). The complex was found to be eligible for listing in the NRHP under criteria A, B and C for its associations with the development of the junior college system in San Mateo County (Criterion A), with Board President and Superintendent Julio Bortolazzo (Criterion B), and as an excellent example of its style type and association with the works of master architect John Carl Warnecke (Criterion C) (Supernowicz 2011). Refer to **Figure 3.4-1** for a map of the contributing elements to the College of San Mateo Historic District.

A historic district was also found eligible for listing in the NRHP with the Arts Complex, Library, Administration building, and Gymnasium as contributors. The current study concurs with these findings. However, after a thorough district analysis, the current study concludes that the Gymnasium does not appear to be a contributor to the historic district because it is visually disconnected from the core buildings. The northern campus classroom buildings from the 1963 campus retain their integrity of location, design, materials, and workmanship. However, they were designed and configured at the site to work together visually with the buildings and landscape which have since been demolished. As such, the northern campus, as well as the formally designed landscape, no longer retains sufficient integrity of association and setting to convey their original design intent and, therefore, do not appear to be contributing elements to a potential historic



Graphics / 00234.15 / SMCCCD Facilities Update EIR (7-28-2015)

Figure 3.4-1
College of San Mateo Historic District

district. The current study concludes that the Fine Arts Complex, Library, and Administration buildings appear to be eligible for listing in the NRHP and are, therefore, also eligible for the CRHR under Criteria 1, 2 and 3 and as contributors to a NRHP-eligible historic district.

The Cañada and Skyline College campuses have not been formally evaluated under the current study because they have not reached 50 years of age. Furthermore, California Office of Historic Preservation guidance to use NRHP criteria considerations suggests that as properties less than 50 years old, Cañada and Skyline College campuses must show exceptional importance to contain individually CRHR eligible buildings and, to be considered as historic districts, must contribute to or be integral parts of an historic district that includes properties over 50 years of age (National Register Bulletin: Guidelines for Evaluating and Nominating Properties that Have Achieved Significance Within the Past Fifty Years, U.S., VIII. Properties in Historic Districts: 10). Neither campus appears to reach either the exceptional importance of design or the historical association required of potential historic resources that are less than 50 years of age.

CRHR Criterion 1

Under CRHR Criterion 1 (event), the CSM campus is associated with the growth and expansion of the junior college system in San Mateo County. The need for expanding the junior college to accommodate the growing student body had been a consistent issue since the establishment of the college in the 1920s. After several moves and, driven in part by the skyrocketing student body after World War II, San Mateo County voted for a substantial bond measure in 1957 for the creation of a college at the current site of CSM. The 25-year Master Plan for the school district, headed by Board President and Superintendent Julio Bortolazzo, culminated in the creation of the CSM campus in 1963, the Cañada College in 1968, and Skyline College in 1969. The period of significance for the junior college district is from 1956, when Bortolazzo began his tenure and spearheaded the design and construction of College Heights and the later campuses from 1957 to 1969, with the construction of the final college campus, Skyline College in San Bruno. All three campuses in the District appear to be significantly associated with the events surrounding the expansion and creation of the District in San Mateo County. However, per the State CEQA Guidelines, the Cañada and Skyline College campuses have not been formally evaluated under the current study because they have not reached 50 years of age and do not appear to exhibit the exceptional importance that would prompt evaluation (U.S. Department of the Interior 1979). A portion of the CSM campus appears to be eligible for listing in the CRHR under Criterion 1 as a historic district for its significant associations with the growth and expansion of the District.

CRHR Criterion 2

Under CRHR Criterion 2 (person), the CSM campus is associated with the president and superintendent of the District, Dr. Julio Bortolazzo, who spearheaded the expansion of the San Mateo junior college system during a time of great student demand. The struggle to find and move to a permanent and consolidated campus had continued almost since the creation of the junior college.

Soon after being hired in 1956 as superintendent, Bortolazzo set himself to the hard work of finding and funding the creation of a permanent campus for the junior college. He championed the successful bond measure in 1957 which would make a campus a reality for the community college's construction. Bortolazzo's vision was to create a junior college that would reflect the dignified grandeur of a university rather than modest junior colleges, bring free and affordable higher education to the public, and set a new precedent of excellence in community colleges in California.

Bortolazzo understood that education was the key factor as a way out of poverty and that the high cost of tuition made education difficult for the working class people. Bortolazzo's vision of greatly expanding affordable college education, beginning with the extraordinary expansion of the District, is a remaining legacy of the three community colleges serving San Mateo County. He also championed the Delta College District in San Joaquin County in 1968, as well as the expansion of a junior college in Santa Barbara. His international efforts included the development of community college systems in Italy and Liberia (Bohan 2006).

All three campuses in the District appear to be significantly associated with Bortolazzo as enduring visual reminders of his legacy. However, the Cañada College and Skyline College campuses have not been formally evaluated under the current study because they have not reached 50 years of age and do not appear to exhibit the exceptional importance that would prompt evaluation. The CSM campus, therefore, appears eligible for listing as a historic district in the CRHR under Criterion 2 for its association with Julio Bortolazzo and his enduring legacy in the region as a community college pioneer and advocate.

CRHR Criterion 3

Under CRHR Criterion 3, the CSM campus is associated with the work of master Modern architect John Carl Warnecke and has been lauded by the leading Modern architecture preservation and education organization, Docomomo US, for his application of Modern design principles and the elaborate and creative use of concrete as a building material in the campus' design.

The campus buildings designed by Warnecke are in the Neo-Formalist style of architecture which was developed as a reaction to the over-use and increasingly redundant handling of the International Style as it became what could loosely be termed "Orthodox Functionalism." Architects employing principles of Neo-Formalism often sought to return classically-inspired elegance to Modern architecture and employed such character defining elements as symmetrical plans, heavy overhanging roof slabs, full-height columns of concrete or steel, arcade of stylized arches and columns, and other stylized but functional ornamentation in concrete and/or steel. Many Neo-formalist buildings, including buildings at CSM, read as Modern interpretations of Classical temples or Gothic arcades.

The extant buildings on the campus dating to Warnecke's 1960 design craftily use hyperbolic paraboloids of precast concrete for the folded plate roofs and the colonnade walkways. The Library building is wrapped in decorative concrete screens and elevated on a concrete slab that makes the building appear to be floating. The Fine Arts Complex features a concrete amphitheater and a seamless design incorporating abstract stairwells, colonnades and concrete hyperbolic paraboloids. The four façades of the Administration building are wrapped with the folded plate roof and bays of glass windows. These three buildings; the Fine Arts Complex, Library, and Administration building, create a visually cohesive campus core representing Warnecke's fine achievements in Neo-Formalism and Modernism in general.

The Gymnasium is one of the campus' more architecturally subdued examples of this style. In addition, the construction of the Health and Wellness Building at the place of the former Building 5 in by 2010 visually cut the Gymnasium off from the campus core consisting of the Fine Arts Complex, Library, and the Administration buildings. The northern campus, consisting of the classroom buildings and faculty offices, has been significantly altered. The remaining Warnecke buildings in this part of the campus, which include Buildings 12 and 19, feature glass and concrete wall façades capped by the thematic hyperbolic paraboloid roof design. While these buildings retain their

original design, the demolition of approximately four of the original campus buildings that were designed as parts of a cohesive whole, addition of new buildings, and the renovation of the original landscape design visually detract from the cohesiveness of Warnecke's Neo-Formalist campus design.

The Fine Arts Complex, Library, and Administration building appear to be eligible for listing in the CRHR under Criterion 3 as contributing buildings to the CRHR-eligible College of San Mateo Historic District, associated with modern architecture and the Neo-Formalism principles and as an important regional example of Warnecke's body of work.

CRHR Criterion 4

Under CRHR Criterion 4, the CSM campus does not appear to be significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies.

Integrity

The CSM campus remained unchanged from its original design plan until the 2000s. Two voter-approved bond measures paved the way for the modernization and repair of all three campuses in the District.

Renovations to the CSM campus occurred in 2002 through 2010 with the construction of a new planetarium and Science Center, an Allied Health and Wellness/Aquatics Center, and a large College Center. The modernization efforts also included the demolition of Buildings 5, 10, and the classroom Buildings 21 through 29 at the northwest end of campus. Pathways were altered to become compliant with the Americans with Disabilities Act, while new landscape plantings, reflecting pools, and lawns were added. In the process, a number of Warnecke's original landscape features such as the plazas and courtyards, fountains, concrete benches, trash receptacles, lawns and pathways were either demolished or significantly reconfigured. The pool and water feature fronting the Fine Arts Complex and Library, although they remain in their original location, were altered during the modernization efforts and no longer resemble the original pools designed by Warnecke.

The modernization efforts of the 2000s considerably altered the pre-existing campus design. In its current state, the CSM campus as a whole retains moderate to low historical integrity to the original design plan as constructed in 1963.

The northern campus classroom buildings from the 1963 campus retain their integrity of location, design, materials, and workmanship. However, they were designed and configured at the site to work together with the aforementioned buildings which have been demolished as of 2010. As such, the northern campus, as well as the landscape, no longer retains sufficient integrity of association and setting to convey their original design intent.

The southern part of the campus also does not retain sufficient landscape integrity and the construction of the Health and Wellness Center in the place of the former building has visually cutoff the Gymnasium from its setting as a visual anchor and no longer conveys the design intent as a cohesive part of the original core campus including the Fine Arts Complex, Library, and Administration building. The three core buildings retain sufficient integrity of design, materials, workmanship, location, association, and feeling. The three buildings continue to be visually connected and together represent the original elements of Warnecke's design intent as a grand Modernist university with formal axes.

Conclusion

The Fine Arts Complex, Library, and Administration building appear to be eligible for listing in the CRHR (historically significant for CEQA purposes) and associated with the events around the development and expansion of the junior college system in San Mateo County. They are also representative of the legacy of long-time president and superintendent of the San Mateo County junior college system, Julio Bortolazzo, as well as significant examples of the CSM campus architect, John Carl Warnecke and fine examples of the Neo-Formalist style. The Fine Arts Complex, Library, and Administration building appear to be the only buildings eligible for listing in the CRHR as contributors to the NRHP-eligible College of San Mateo Historic District under Criteria 1, 2 and 3. The Fine Arts Complex and Library also appear to be eligible for individual listing in the CRHR under Criteria 1, 2 and 3. Refer to **Table 3.4-2** for a list of the contributing features to the CRHR-eligible College of San Mateo Historic District.

Table 3.4-2. College of San Mateo Historic District Contributors

Building #	Building Name	Current Study: OHP Status Code
1	Administration	3CD
2–4	Fine Arts Complex: Music (2), Theater (3), Art (4)	3CB
9	Library	3CB

California Office of Historic Preservation (OHP) Status Code 3CB: Appears eligible for CRHR both individually and as a contributor to a CRHR eligible district through a survey evaluation.
OHP Status Code 3CD: Appears eligible for CRHR as a contributor to a CRHR eligible district through a survey evaluation.

3.4.3 Impacts Analysis

3.4.3.1 Methodology

To identify cultural resources in or within 0.5-mile of the three campuses, researchers took the following actions.

- California Historical Resources Information System (CHRIS) records search.
- Consultation with the Native American Heritage Commission (NAHC) and Native American representatives.
- Examination of historic maps.
- Historical research.
- Architectural history field survey.
- Archaeological field survey.

Records Search Results

Bibliographic references, previous survey reports, historic maps, and archaeological site records pertaining to the study area were compiled through a records search of the CHRIS to identify prior studies and known cultural resources within a 0.5-mile radius of each campus.

This records search (File #14-1508) was conducted at the Northwest Information Center (NWIC), Sonoma State University, Rohnert Park, on April 30, 2015. The records search involved a review of the following information.

- Site records for previously recorded sites.
- All previous studies conducted within, or within 0.5-mile of, the Archaeological Area of Potential Effect (APE).
- The NRHP.
- The California Historic Resources Inventory.
- The Office of Historic Preservation (OHP) Historic Properties Directory (HPD).

Previously-Recorded Cultural Resources in or within 0.5-Mile of Each Campus

Cañada College

The NWIC did not identify any resources within 0.5 mile of the Cañada College campus.

College of San Mateo

The NWIC identified one resource on the CSM campus.

- P-41-002284: This resource consists of the College of San Mateo Fine and Performing Arts building (Building 3), a two to three-story reinforced concrete Fine Arts Complex designed in the Formal Modern Classical style of architecture. The building is characterized by a central plaza surrounded on three sides by two-story classrooms and a two-story arcade. It was built in 1962–1963 and has an NRHP status code of 3D (appears eligible for the NRHP as a contributor to a NRHP-eligible district through survey evaluation).

The NWIC identified one resource within 0.5 mile of the CSM campus.

- P-41-000456/CA-SMA-339: This resource consists of a "badly disturbed" shell midden site with some fire cracked-rock. The site records notes that there is "considerable disturbance" to the site integrity as Polhemus Road is graded through the site (Chavez 1993).

Skyline College

The NWIC identified one resource on the Skyline College campus.

- P-41-002112: This resource consists of The San Francisco Radio Station/Coast Guard Reservation, which is now a maintenance facility complex that consists of an administration building, storage lockers, and maintenance building. The site was the former location of a U.S. Coast Guard Station, circa early 1940s, with additions/ modifications in the 1980s. This resource was recommended not eligible for the NRHP.

The NWIC identified one resource within 0.5 mile of the Skyline College campus.

- P-41-002294/CA-SMA-398/H: This resource consists of the Former Sharp Park Rifle Range Project/ Sharp Park Temporary Detention Station/ Sharp Park State Relief Camp. There are seven associated features: a linear fence foundation, linear target anchor foundations, redwood structures (appeared to be 4 privy vaults), 2 redwood structures, redwood planks, and sheet scatter of early-mid twentieth century household debris, plus one chert flake. This resource was recommended not eligible for the NRHP.

Previous Cultural Resources Studies in or within 0.5-Mile of Each Campus

Cañada College

No studies conducted on the Cañada College campus have been reported to the NWIC. Five studies have been conducted within 0.5-mile of the Cañada College campus. Those studies are listed in **Table 3.4-3**.

Table 3.4-3. Cultural Resources Studies Conducted within 0.5 mile of the Cañada College Campus

Study	Title	Author(s)	Year	Location	Type of Study
3044	Cultural Resources Evaluation of the Emerald Lake Hills Sanitation Facilities Project, San Mateo County, CA	D. Chavez	1977	about 1/3-mile to 1/2-mile north of the Cañada College campus	linear, for proposed pipeline routes
3127	Archaeological reconnaissance of the proposed 17 acre residential subdivision, "Farm Hill Road Site," Redwood City, CA (letter report)	T. L. Jackson	1977	east of Farm Hill Road, about 1/8-mile east of the Cañada College campus	area-specific
23658	Archaeological Survey and Cultural Resources Assessment of the Green School Project, Woodside, San Mateo County, CA (letter report)	W. Self and K. Popetz	2001	east of Farm Hill Road, about 1/8-mile east of the Cañada College campus	site-specific for school project
28905	Cultural Resources Analysis for Cingular Wireless Site BA-110-01 "Elks Lodge, Emerald Hills," Redwood City, CA (letter report)	C. Losee	2004	about 1/4-mile north of the Cañada College campus	site-specific for cellular tower
31972	Cultural Resources Analysis for Cingular Wireless Site SNFCCAC043: 5055 Farm Hill Boulevard, Woodside, CA 94062 (letter report)	C. Losee	2006	about 1/4-mile southeast of the Cañada College campus	site-specific for cellular tower

College of San Mateo

The following six studies have been conducted on the CSM campus.

- S-6245, Chavez, D. 1983. *Citywide Archaeological Investigations, City of San Mateo, California*. No resources in or adjacent to the CSM campus were identified during this study.
- S-8310, Roop, W. 1978. *Archaeological Reconnaissance of the Tobin Clark Estates Subdivision, Hillsborough*. No resources in or adjacent to the CSM campus were identified during this study.
- S-21879, San Mateo Co. Historical Association. 1990. *Town of Hillsborough, Historic Building Survey*. No resources in or adjacent to the CSM campus were identified during this study.
- S-25221, Windmiller, R. 2002*. Archaeological Survey Report, AT&T Wireless Services Site C098, GeoTrans Project L232-000, College of San Mateo*. No resources were identified during this study.

- S-27751, Billat, L. 2000. *Nextel Communications Wireless Telecommunications Service Facility-San Mateo County, Nextel Site No. (CA-0510B)/College of San Mateo*. No resources were identified during this study.
- S-38145, Supernowicz, D. 2011. *Collocation Submission Packet, College of San Mateo, CN1796*. P-41-002284, the College of San Mateo Fine and Performing Arts building, was recorded during this study.

An additional 17 studies have been conducted within 0.5 mile of the CSM campus. Those studies are listed in **Table 3.4-4**.

Table 3.4-4. Cultural Resources Studies Conducted within 0.5 mile of the College of San Mateo Campus

Study	Title	Author(s)	Year	Location	Type of Study
3174	Indian Shell Mounds of San Mateo Creek and Vicinity	J. Hamilton	1936	various locations in vicinity of San Mateo Creek; within 1/2-mile of the CSM campus	resource-specific
10483	Jacobs Subdivision, Archaeological Field Inspection (letter report)	M.P. Holman	1987	about 1/3-mile north of the CSM campus	area-specific for subdivision
21300	Archaeological Survey Report, 04-SMA-92 P.M. 9.5/9.8, Proposed Repair of Roadway	D. Chavez, J. Hupman	1998	about 1/8-mile east of the CSM campus	infrastructure improvements (road repair)
21643	Review of the Historic Resources of the Built Environment for Site 170-01, 1205 W. Hillsdale Blvd, Suite A, San Mateo, San Mateo County, CA	K. Wilson	1999	1205 W. Hillsdale Blvd, San Mateo, about 1/8-mile east of the CSM campus	site-specific for building
22236	Cultural Resource Evaluation of Lands for the Yew Street Project in the Town of Hillsborough	R. Cartier	1999	about 1/2-mile north of the CSM campus	site-specific
22712	Hillsborough Trunk Sewer; Records Search and Field Survey Results	W. Self	2000	about 1/2-mile west of the CSM campus	infrastructure improvements (sewer)
24104	Cultural Resource Evaluation of Lands for the Stonebridge Project on Yew Street in the Town of Hillsborough	R. Cartier	2000	about 1/2-mile north of the CSM campus	site-specific
28762	SHPO Review of an FCC Undertaking, Crystal Springs 2/ CA-2540A	L. Billat	2004	about 1/4-mile southwest of the CSM campus	site-specific for cellular tower
30239	Cultural Resources Study of Polhemus Rd. and Crystal Springs Project, AT&T Wireless Services Site No. 960006304A, 1452 Bel Aire Road, San Mateo, San Mateo County, CA 94402	D. Supernowicz	2002	about 1/4-mile southwest of the CSM campus	site-specific for cellular tower

Study	Title	Author(s)	Year	Location	Type of Study
30906	Caltrans Historic Bridge Inventory Update: Concrete Arch Bridges, Contract 43A0089, T.O.: 01, Vol. 1: Reports and Figures	C. McMorris	2004	about 1/2-mile west of the CSM campus	site-specific for bridge study
35102	AT&T Mobility Project No. CN5678-A "Hillsborough-Odyssey School", 201 Polhemus Road, San Mateo City and County, CA	C. Losee	2008	about 1/2-mile west of the CSM campus	site-specific for cellular tower
35859	Cultural Resources Records Search Review for Four Hillsborough Overlay Projects for 2009, San Mateo County, Federal Number ESPL 5191 (004)	S. Psota	2009	about 1/2-mile west of the CSM campus	infrastructure improvements
36313	Crystal Springs Pipeline No. 2 Replacement Project, San Francisco and San Mateo Counties: Historic Context and Archaeological Survey Report	ESA and Orion	2009	about 1/2-mile west of the CSM campus	infrastructure improvements (water)
36757	NHPA Section 106 Compliance for the Town of Hillsborough SCADA Upgrade Project, Type A Installations, San Mateo County	M. Clark	2010	about 1/4-mile west of the CSM campus	infrastructure improvements
38336	Hillsborough Fire Hazard Mitigation and Fuel Reduction Program, PDMC-PJ-09-CA-2008-057, Finding of No Adverse Effects to Historic Properties	M. Kick, B. Elliott	2011	about 1/2-mile northwest of the CSM campus	fire hazard mitigation and fuel reduction study
38910	Archaeological Survey Report for the Crystal Springs Pipeline No. 2, Replacement Project: Wholesale Service Line 82 (MPM 005)	R. Wiberg	2012	about 1/2-mile west of the CSM campus	infrastructure improvements (water)
39125	NHPA Section 106, Historic Properties Inventory & Compliance Plan for the Crystal Springs County Sanitation District, San Mateo County Department of Public Works Wasterwater CIP	M. Clark	2012	covers an area south of Parrott Drive, from across the CSM campus to 1/2-mile southwest of the CSM campus	infrastructure improvements (water)

Skyline College

The following three studies have been conducted on the Skyline College campus.

- S-27126, Billat, L. 2003. *SHPO Review of FCC Undertaking, Skyline Westborough/CA-2574A*. No resources were identified during this study.
- S-33826, Bonner, W., J, Keasling, and K. Crawford. 2007. *Cultural Resources Records Search & Results & Site Visit for T-Mobile Telecommunications Facility Candidate SF23007 (Skyline College), 3300 College Drive, San Bruno, San Mateo County*. P-41-002112, the San Francisco Radio Station/Coast Guard Reservation, was recorded during this study.
- S-37649, Billat, L. 2010. New Tower ("NT") *Submission Packet FCC FORM 620 DSA College Drive Pole SF-23007B*. No resources were identified during this study.

An additional 14 studies have been conducted within 0.5 mile of the Skyline College campus. Those studies are listed in **Table 3.4-5**.

Table 3.4-5. Cultural Resources Studies Conducted within 0.5 mile of the Skyline College Campus

Study	Title	Author(s)	Year	Location	Type of Study
3076	Cultural Resources Evaluation of the Viewridge Condominium Location in Pacifica (letter report)	D. Chavez	1979	about 1/2-mile north of the Skyline College campus	area-specific
3080	Cultural Resources Evaluation of the Sweeney Ridge Development Area, City of Pacifica, San Mateo County, CA	D. Chavez	1979	about 1/2-mile south of the Skyline College campus	area-specific
4877	Archaeological reconnaissance of proposed Route 380, between Hwy. 280 on the east and Hwy. 1 on the west	M. Moratto	1974	along Route 380, about 1/2-mile south of the Skyline College campus	linear (roadway)
6717	Cultural Resources Evaluation of the Sharp Park Road Expansion Project in the City of Pacifica, San Mateo County	R. Cartier	1984	Sharp Park area, about 1/2-mile southwest of the Skyline College campus	area-specific
10486	Archaeological Literature Review for the Pacifica GPA (letter report)	M.P. Holman	1987	about 1/2-mile west of the Skyline College campus	area-specific
14542	Archaeological Reconnaissance of the San Bruno Jail Property, San Mateo County, CA	S. Baker and M. Smith	1992	covers an area adjacent to the Skyline College campus, extending about 1/2-mile to the southeast	area-specific
23189	Site Description, Location and Photographs, SF-185-01, Joint Pole, Southeast Corner of Highway 35 and Bershire Road, San Bruno, CA	S. Psota	2000	the southeast corner of Highway 35 and Bershire Road, about 1/2-mile east of the Skyline College campus	site-specific for cellular tower

Study	Title	Author(s)	Year	Location	Type of Study
25353	A Cultural Resources Survey for the Skyline Summer Hill Homes Development, San Bruno, San Mateo County, CA	T. Douglass and T. Origer	2002	covers an area adjacent to the Skyline College campus, extending about 1/4-mile northeast	area-specific for subdivision
27930	Cultural Resources Assessment of Alternative Routes for PG&E's Jefferson-Martin Transmission Line, San Mateo County, CA	W. Self Associates, Inc.	2003	about 1/3-mile east of the Skyline College campus	linear, along Skyline Blvd, for transmission line
29832	Mounting three panel antennas on an existing monopole, equipment shelter, Westborough Skyline Tank/ SF-05230B, Sharp Park Road to right of 720 Sharp Park Road, Pacifica, CA	S. Thal	2005	near 720 Sharp Park Road, about 1/2-mile north of the Skyline College campus	site-specific for cellular tower
31602	Historic Properties Inventory Research for National Historic Preservation Act Section 106 Compliance for the North Coast County Water District, Pacifica Recycled Water Project	M. Clark	2006	about 1/4-mile to 1/2-mile southwest of the Skyline College campus	linear study for water improvements
34499	Historic Properties Inventory Research for National Historic Preservation Act Section 106 Compliance for the North Coast County Water District, Pacifica Recycled Water Project	M. Clark	2006	about 1/4-mile to 1/2-mile southwest of the Skyline College campus	linear study for water improvements
38107	San Francisco County Jail #3 Historic American Buildings Survey (HABS)	Page & Turnbull	2011	about 1/4-mile southeast of the Skyline College campus	HAB survey
39337	Former Sharp Park Rifle Range Project: Final Archaeological Resources Report	Archeo-Tec	2011	about 1/2-mile southwest of the Skyline College campus	planning study

Additional Research

Property Specific Research

In an effort to identify historically important individuals, historic events and architectural trends associated with the District, an ICF architectural historian conducted archival research in April and May 2015 at the San Francisco Public Library and San Mateo Public Library. Historic San Mateo Times newspaper clippings were viewed as well as the book, *Class Act,* written by Michael Svanevik, a social history of CSM. Additional secondary research materials included a review of books on Modern Architecture, particularly Neo-Formalism. Online research efforts included a review of historic photos provided by the College of San Mateo Library Archives; vital records and census data available at Ancestry.com; newspaper articles; and historical aerial imagery at Historicaerials.com.

Native American Consultation

On April 28, 2015, ICF contacted the Native American Heritage Commission (NAHC) to request a Sacred Lands File search for known cultural resources in or in the vicinity of all three campuses, and a list of Native American contacts with potential interest in this Project.

A response from the NAHC was received on June 8, 2015. The Sacred Lands Search failed to indicate the presence of Native American cultural resources in the immediate Project area (NAHC 2015). The NAHC provided ICF with a list of nine Native American contacts. ICF sent letters with Project summaries and Project location maps to these contacts on August 6, 2015, inviting them to provide comments and/or information regarding cultural resources in the vicinity of the three campuses.

Appendix D contains the Native American correspondence to date. As this effort is ongoing, it will be updated as soon as additional information is received.

3.4.3.2 Field Survey

Architectural Field Survey

An ICF architectural historian surveyed all three college campuses on April 20, 2015, and May 8, 2015. The survey included field verification of all resources over the age of 50 years, documentation of any visible changes, alterations and additions to the campuses, and documentation of the campuses with photographs and written notes. The survey was focused on the CSM campus because it was constructed in 1963 and has reached the 50 year threshold required under CRHR criteria considerations. The Cañada College campus was designed in 1967 and constructed in 1968 by master modern architect Welton Becket, while the Skyline Campus was designed in 1968 and constructed in 1969 by master modern architect John Carl Warnecke. A building constructed in the late 1950s was observed on the Skyline College campus. This building was designed in a Ranch style with Spanish Eclectic influences such as the clay tile roof and brick siding. Historic aerials indicate this structure was present between 1957 and 1968. Sufficient data, including original design plans are not accessible and, therefore, a determination of age is not possible under the current study.

Archaeological Field Survey

On May 18, 2015, an archaeological field survey was conducted at all three college campuses. The ground was inspected as much as possible, based on ground coverage, development, and accessibility, for indications of human activity such as midden soils, lithics, modified stone or bone, historic-era resources such as ceramics and glass, construction debris, and foundations/pads. The field survey methods and results are presented below by campus (Nationwide Environmental Title Research 2012).

Cañada College

Building 1, Gymnasium is slated for demolition; it is located near the south of campus. The area surrounding the building was surveyed for indicators of cultural material. The entire area has been paved and landscaped; there was very little ground visibility.

Three temporary buildings (Buildings 19, 20, and 21) on the north edge of campus are slated for removal. This area was surveyed, along with the possible locations of new buildings. The entire area has been paved and landscaped. There was no ground visibility. The parking lot near the temporary buildings (Lot 10) would be expanded. This area was examined closely for cultural indicators. The area has been graded and covered in gravel.

No cultural material was observed at Cañada College.

College of San Mateo

Building 8, Gymnasium is planned to be demolished and a new building built in its location. The building is located next to the Aquatic Center on the southside of the campus on a hill. The area was completely covered in asphalt and landscaping, with oak trees covering the slope of the hill. There was almost no ground visibility. The area around the existing building was surveyed, and sediment was examined closely where visible. Most of the ground is comprised of fill or covered in bark or low growing ground cover.

No cultural material was observed at CSM.

Skyline College

Building 1, Fine Arts and Performing Arts is slated for demolition as well as the location for new construction. The area surrounding the building was surveyed. The entire area has been paved and landscaped, and there was no ground visibility.

The area extending from Lot C to Building 1 is listed for proposed site development. This area has a slight slope toward the campus buildings. The ground is covered in ivy and other close-growing plants and pine trees. Ground visibility was poor. A trowel was used to scrape down to the soil intermittently.

New construction is also proposed at the current Vista Point on the west side of campus. This area is currently used as a small parking lot with a few benches. A new Environmental Sciences building is proposed at this location. Half of the area is paved; however, the other half has excellent ground visibility. The ground slopes sharply to the west and is covered in native brush and vegetation. All areas were closely examined for cultural material.

No cultural material was observed at Skyline College.

3.4.3.3 Significance Criteria

The State CEQA Guidelines Appendix G (14 CCR 15000 et seq.) has identified significance criteria to be considered for determining whether a project could have significant impacts on existing cultural resources.

An impact would be considered significant if construction or operation of the project would have any of the following consequences.

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
- Disturb any human remains, including those interred outside of formal cemeteries.

3.4.3.4 Impacts and Mitigation Measures

Cañada College

Impact CC-CUL-1: Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 (no impact)

The Cañada College campus was constructed in 1968. The campus is less than 50 years of age and is, therefore, not subject to CRHR-criteria consideration under the current study. Therefore, there are no impacts on any known historic resources at Cañada College.

Impact CC-CUL-2: Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 (less than significant with mitigation)

Although no archaeological resources were identified either through the background records search or during the Project area survey, the potential always exists for previously undiscovered prehistoric or historic archaeological resources to be encountered during construction of various elements of the Project. With implementation of **Mitigation Measure CC-CUL-1**, this impact would be less than significant.

Mitigation Measure CC-CUL-1: Stop work if cultural resources are encountered during ground-disturbing activities at Cañada College

The District will ensure the construction specifications include a stop work order if prehistoric or historic-period cultural materials are unearthed during ground-disturbing activities. All work within 100 feet of the find will be stopped until a qualified archaeologist and Native American representative can assess the significance of the find. Prehistoric materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool making debris; culturally darkened soil (midden) containing heat-affected rocks and artifacts; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered-stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. If the find is determined to be potentially significant, the archaeologist, in consultation with the Native American representative, will develop a treatment plan that could include site avoidance, capping, or data recovery.

Impact CC-CUL-3: Disturb any human remains, including those interred outside of formal cemeteries (less than significant with mitigation)

Although no human remains were identified either through the background records search or during the Project area survey, the potential always exists for previously undiscovered human remains to be encountered during construction of various elements of the Project. With implementation of **Mitigation Measure CC-CUL-2**, this impact would be less than significant.

Mitigation Measure CC-CUL-2: Stop work if human remains are encountered during ground-disturbing activities at Cañada College

The District will ensure the construction specifications include a stop work order if human remains are discovered during construction or demolition. There will be no further excavation or disturbance of the site within a 50-foot radius of the location of such discovery, or any nearby

area reasonably suspected to overlie adjacent remains. The San Mateo County Coroner will be notified and will make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he will notify the Native American Heritage Commission, who will attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this state law, then the land owner will re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

College of San Mateo

Impact CSM-CUL-1: Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 (less than significant)

As described previously, there is a CRHR-eligible historical district on the CSM campus, which includes the Fine Arts Complex, Library, and Administration building as contributors. The Project proposes to demolish and reconstruct Building 8, Gymnasium, as well as Buildings 12 and 19, and construct a new Building 19. Although Buildings 8, 12, and 19 were designed by master modern architect, John Carl Warnecke, and constructed during the period that makes the historic district significant, this analysis has found that the Gymnasium does not appear to be eligible for individual listing in the CRHR or as a contributor to the CRHR-eligible College of San Mateo Historic District. The construction of Building 5 has obscured the view of the Gymnasium, particularly from the Fine Arts Complex, undermining the ability of the Gymnasium to contribute to Warnecke's design intent of a university quadrangle and to form a bookend building on an important visual axis of the Neo Formalist landscape (the bookends concept comes from the design intent of Warnecke and is shown in the supporting DPR 523 forms for the District in Appendix D). Buildings 12 and 19 are located in the northern section of the campus, which consists of classroom and faculty buildings. The historical integrity of the northern campus has been diminished with the removal of several buildings, renovation of the original landscape design, and addition of new buildings. The buildings in this part of campus were designed and configured at the site to work together visually with the buildings and landscape features that have since been demolished. As such, the present study concludes that the northern campus containing Buildings 12 and 19 no longer retains sufficient integrity of association and setting to convey its original design intent and, thus, Buildings 12 and 19 do not appear to be contributing elements to a potential historic district.

Therefore, the Project would not cause a substantial adverse change in the significance of an historical resource pursuant to Section 15064.5. The impact of the Project on historic resources is less than significant. No mitigation is required.

Impact CSM-CUL-2: Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 (less than significant with mitigation)

Although no archaeological resources were identified either through the background records search or during the Project area survey, the potential always exists for previously undiscovered prehistoric or historic archaeological resources to be encountered during construction of various elements of the Project. With implementation of **Mitigation Measure CSM-CUL-1**, this impact would be less than significant.

Mitigation Measure CSM-CUL-1: Stop work if cultural resources are encountered during ground-disturbing activities at the College of San Mateo.

This mitigation is the same as Mitigation Measure CC-CUL-1 described under Impact CC-CUL-2, but would be implemented at the College of San Mateo.

Impact CSM-CUL-3: Disturb any human remains, including those interred outside of formal cemeteries (less than significant with mitigation)

Although no human remains were identified either through the background records search or during the Project area survey, the potential always exists for previously undiscovered human remains to be encountered during construction of various elements of the Project. With implementation of **Mitigation Measure CSM-CUL-2**, this impact would be less than significant.

Mitigation Measure CSM-CUL-2: Stop work if human remains are encountered during ground-disturbing activities at the College of San Mateo

This mitigation is the same as Mitigation Measure CC-CUL-2 described under Impact CC-CUL-3, but would be implemented at the College of San Mateo.

Skyline College

Impact SC-CUL-1: Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 (less than significant)

The Skyline College campus was constructed in 1969. The campus is less than 50 years of age as dictated by CRHR guidelines, and, therefore, is not subject to CRHR criteria consideration under the current study. One building on the campus constructed over 50 years ago (Building 19, Pacific Heights—constructed circa 1956) was observed on the Skyline College campus during the May 2015 architectural field survey. The Project proposes to demolish Building 19, Pacific Heights, and Building 20, which have been owned and operated by the District since 2001. Sufficient data, including original design plans are not accessible and therefore a determination of age is not possible under the current study. No impacts on any known historic resources are proposed. Therefore, the impact of the Project to historic resources is less than significant. No mitigation is required.

Impact SC-CUL-2: Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 (less than significant with mitigation)

Although no archaeological resources were identified either through the background records search or during the Project area survey, the potential always exists for previously undiscovered prehistoric or historic archaeological resources to be encountered during construction of various elements of the Project. With implementation of **Mitigation Measure SC-CUL-1**, this impact would be less than significant.

Mitigation Measure SC-CUL-1: Stop work if cultural resources are encountered during ground-disturbing activities at Skyline College

This mitigation is the same as Mitigation Measure CC-CUL-1 described under Impact CC-CUL-2, but would be implemented at Skyline College.

Impact SC-CUL-3: Disturb any human remains, including those interred outside of formal cemeteries (less than significant with mitigation)

Although no human remains were identified either through the background records search or during the Project area survey, the potential always exists for previously undiscovered human remains to be encountered during construction of various elements of the Project. With implementation of **Mitigation Measure SC-CUL-2**, this impact would be less than significant.

Mitigation Measure SC-CUL-2: Stop work if human remains are encountered during ground-disturbing activities at Skyline College

This mitigation is the same as Mitigation Measure CC-CUL-2 described under Impact CC-CUL-3, but would be implemented at Skyline College.

3.4.3.5 Cumulative Impacts

Cañada College

While the Cañada College campus is located in an urbanized area, it is mostly visually separate from urban or residential cores and is physically separated from the other two colleges in the District. The campus is less than 50 years of age and, therefore, was not subject to CRHR criteria considerations. Therefore, cumulative impacts on historic resources are considered less than significant.

Although no known archaeological resources were identified within 0.5 mile of the Cañada College campus, there is the possibility that previously undiscovered archaeological resources, including human remains, could be encountered during construction. The Project, in combination with other foreseeable development in the identified geographic context, also has the potential to encounter and damage or destroy previously unknown archaeological resources during construction. All significant archaeological resources, including human remains, are unique and nonrenewable resources. For this reason, the cumulative effects of all development on these resources are considered potentially significant.

As analyzed above, the Project could potentially contribute to the cumulative loss of archeological resources and human remains. Therefore, the Project's contribution could be considerable, resulting in a potentially significant cumulative impact. **Mitigation Measure CC-CUL-1** and **Mitigation Measure CC-CUL-2** prescribe discovery procedures for any previously unknown archaeological resources or human remains encountered during Project construction. The discovery procedures are consistent with professional standards and, as they pertain to discovered human remains, are compliant with state law. Compliance with these mitigation measures would reduce the Project's contribution to the cumulative impact to less than cumulatively considerable and reduce the potentially significant cumulative impacts associated with the loss of archaeological and paleontological resources and the disturbance of human remains to a less-than-significant level.

College of San Mateo

The College of San Mateo is also surrounded by urbanization, but mostly visually separate from urban or residential cores. It is physically separated from the other two colleges in the District. The Project proposes to demolish and reconstruct Building 8, Gymnasium. This building does not appear to be eligible for individual listing in the CRHR as a contributor to the CRHR-eligible College of San Mateo Historic District. Cumulative impacts on historic resources are considered less than significant.

Given that a known prehistoric resource was identified within 0.5 mile of the CSM campus, there is the possibility that previously undiscovered archaeological resources, including human remains, could be encountered during construction. The Project, in combination with other foreseeable development in the identified geographic context, also has the potential to encounter and damage or destroy previously unknown archaeological resources during construction. All significant archaeological resources, including human remains, are unique and nonrenewable resources. For this reason, the cumulative effects of all development on these resources are considered potentially significant.

As analyzed above, the Project could potentially contribute to the cumulative loss of archeological resources and human remains. Therefore, the Project's contribution could be considerable, resulting in a potentially significant cumulative impact. **Mitigation Measure CSM-CUL-1** and **Mitigation Measure CSM-CUL-2** prescribe discovery procedures for any previously unknown archaeological resources or human remains encountered during Project construction. The discovery procedures are consistent with professional standards and, as they pertain to discovered human remains, are compliant with state law. Compliance with these mitigation measures would reduce the Project's contribution to the cumulative impact to less than cumulatively considerable and reduce the potentially significant cumulative impacts associated with the loss of archaeological and paleontological resources and the disturbance of human remains to a less-than-significant level.

Skyline College

Skyline College campus is at the edge of an urbanized area and is mostly visually separate from urban or residential cores. It is physically separated from the other two colleges in the District. The campus is less than 50 years of age and therefore is not subject to CRHR criteria considerations. Cumulative impacts on historic resources are considered less than significant.

Although no known archaeological resources were identified within 0.5 mile of the Skyline College campus, there is the possibility that previously undiscovered archaeological resources, including human remains, could be encountered during construction. The Project, in combination with other foreseeable development in the identified geographic context, also has the potential to encounter and damage or destroy previously unknown archaeological resources during construction. All significant archaeological resources, including human remains, are unique and nonrenewable resources. For this reason, the cumulative effects of all development on these resources are considered potentially significant.

As analyzed above, the Project could potentially contribute to the cumulative loss of archeological resources and human remains. Therefore, the Project's contribution could be considerable, resulting in a potentially significant cumulative impact. **Mitigation Measure SC-CUL-1** and **Mitigation Measure SC-CUL-2** prescribe discovery procedures for any previously unknown archaeological resources or human remains encountered during Project construction. The discovery procedures are consistent with professional standards and, as they pertain to discovered human remains, are compliant with state law. Compliance with these mitigation measures would reduce the Project's contribution to the cumulative impact to less than cumulatively considerable and reduce the potentially significant cumulative impacts associated with the loss of archaeological and paleontological resources and the disturbance of human remains to a less-than-significant level.

3.5 Geology, Soils, and Paleontology

This section describes the regulatory and environmental setting for geology, soils, and paleontology. It also describes impacts on geology, soils, and paleontology that would result from implementation of the Project and mitigation for significant impacts, where feasible and appropriate.

3.5.1 Regulatory Setting

The following regulations are relevant to geology, soils, and paleontology and apply to implementation of the Project on all three campuses, unless otherwise specified.

3.5.1.1 Federal

International Building Code

The design and construction of engineered facilities in California must comply with the requirements of the International Building Code (IBC) (International Code Council 2012) adopted by the State of California (refer to *California Building Standards Code* under Section 3.5.1.2).

U.S. Geological Survey National Landslide Hazard Program

To fulfill the requirements of Public Law 106-113, the U.S. Geological Survey created the National Landslide Hazards Program to reduce long-term losses from landslide hazards by improving understanding of the causes of ground failure and suggesting mitigation strategies. The Federal Emergency Management Agency (FEMA) is the responsible agency for the long-term management of natural hazards.

Clean Water Act Section 402

The Clean Water Act (CWA) is discussed in detail in Section 3.8, *Hydrology and Water Quality*. However, because CWA Section 402 is directly relevant to grading activities, information is also provided here.

Section 402 of the CWA mandates that certain types of construction activity comply with the requirements of the U.S Environmental Protection Agency's (EPA's) National Pollutant Discharge Elimination System (NPDES) program. EPA has delegated to the State Water Resources Control Board (State Water Board) the authority for the NPDES program in California, where it is implemented by the state's nine Regional Water Quality Control Boards.

Paleontological Resources Act of 2009

The Paleontological Resources Act of 2009 (Pub. L. No. 111-11, Subtitle D) includes provisions for the protection and preservation of paleontological resources. The law also prohibits the collection of paleontological resources from federal land without a permit, except in the case of noncommercial collecting that complies with other regulations for that federal land.

3.5.1.2 State

Alquist-Priolo Earthquake Fault Zoning Act

California's Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) (Public Resources Code [PRC] Section 2621 et seq.), originally enacted in 1972 as the Alquist-Priolo Special Studies Zones Act and renamed in 1994, is intended to reduce risks to life and property from surface fault rupture during earthquakes. The Alquist-Priolo Act prohibits the location of most types of structures intended for human occupancy[1] across the traces of active faults and strictly regulates construction in the corridors along active faults (earthquake fault zones). It also defines criteria for identifying active faults, giving legal weight to terms such as *active*, and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones.

Under the Alquist-Priolo Act, faults are zoned, and construction along or across them is strictly regulated if they are sufficiently active and well defined. A fault is considered *sufficiently active* if one or more of its segments or strands shows evidence of surface displacement during Holocene time (defined for purposes of the act as referring to approximately the last 11,000 years). A fault is considered *well-defined* if its trace can be identified clearly by a trained geologist at the ground surface or in the shallow subsurface using standard professional techniques, criteria, and judgment (Bryant and Hart 2007).

Seismic Hazards Mapping Act

Like the Alquist-Priolo Act, the Seismic Hazards Mapping Act of 1990 (PRC Sections 2690–2699.6) is intended to reduce damage resulting from earthquakes. While the Alquist-Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong groundshaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the Alquist-Priolo Act—the State is charged with identifying and mapping areas at risk of strong groundshaking, liquefaction, landslides, and other corollary hazards; cities and counties are required to regulate development within mapped seismic hazard zones.

Under the Seismic Hazards Mapping Act, permit review is the primary mechanism for local regulation of development. Specifically, cities and counties are prohibited from issuing development permits for sites within seismic hazard zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans. Geotechnical investigations conducted within Seismic Hazard Zones must incorporate standards specified by California Geological Survey Special Publication 117a, *Guidelines for Evaluating and Mitigating Seismic Hazards* (California Geological Survey 2008).

2013 California Building Standards Code and California Building Code

The State's minimum standards for structural design and construction are given in the California Building Standards Code (CBSC) (24 California Code of Regulations), located in Title 24 of the California Code of Regulations. The CBSC is based on the IBC (International Code Council 2012),

[1] With reference to the Alquist-Priolo Act, a *structure for human occupancy* is defined as one "used or intended for supporting or sheltering any use or occupancy, which is expected to have a human occupancy rate of more than 2,000 person-hours per year" (California Code of Regulations, Title 14, Div. 2, Section 3601[e]).

which is used widely throughout United States (generally adopted on a state-by-state or district-by-district basis) and has been modified for California conditions with numerous and more detailed or more stringent regulations. The CBSC requires that "classification of the soil at each building site will be determined when required by the building official" and that "the classification will be based on observation and any necessary test of the materials disclosed by borings or excavations." In addition, the CBSC states that "the soil classification and design-bearing capacity will be shown on the (building) plans, unless the foundation conforms to specified requirements." The CBSC provides standards for various aspects of construction, including (i.e., not limited to) excavation, grading, and earthwork construction; fills and embankments; expansive soils; foundation investigations; and liquefaction potential and soil strength loss. In accordance with California law, certain aspects of the Project would be required to comply with all provisions of the CBSC.

Title 24 requires extensive geotechnical analysis and engineering for grading, foundations, retaining walls, and other structures, including criteria for seismic design. The Division of the State Architect (DSA) reviews school construction projects for Title 24 compliance. This includes new construction and alteration projects for community college districts. DSA's oversight for structural safety of community college facilities is governed by the provisions of the Field Act (Education Code sections 81130, et. seq.). The Field Act's seismic safety requirements are more stringent than Title 24. Geotechnical reports prepared for community college construction are referred to and reviewed by the California Geological Survey prior to DSA approval.

National Pollutant Discharge Elimination System General Construction Stormwater Permit

As discussed in Section 3.8, *Hydrology and Water Quality*, General NPDES Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ as amended by Order No.2010-0014-DWQ and 2012-0006-DWQ) (Construction General Permit) regulates stormwater discharges for construction activities under CWA Section 402. Dischargers whose projects disturb 1 or more acres of soil, or whose projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 or more acres, are required to obtain coverage under the Construction General Permit. The Construction General Permit requires the development and implementation of a storm water pollution prevention plan (SWPPP).

Because the land disturbance for the Project at the District's three campuses would be greater than 1 acre, a Construction General Permit is required for the Project at each campus.

National Pollutant Discharge Elimination System General Municipal Stormwater Permit

As discussed in Section 3.8, *Hydrology and Water Quality*, CWA Section 402 mandates permits for municipal stormwater discharges, which are regulated under the NPDES general permit for Municipal Separate Storm Sewer Systems (MS4) (MS4 Permit).

MS4 permits require that cities and counties develop and implement programs and measures to reduce the discharge of pollutants in stormwater discharges to the maximum extent possible, including management practices, control techniques, system design and engineering methods, and other measures as appropriate.

As a community college district, the District is considered to be a non-traditional MS4. More information about the District's stormwater management program is in Section 3.8, *Hydrology and Water Quality*, Section 3.8.1.3, and below in Section 3.5.1.3.

California Public Resources Code

Although CEQA does not define a unique paleontological resource or site, California PRC Section 21083.2 (g) states that *unique archaeological resource* means 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 (PRC Section 21083.2 [g]).

With only slight modification, this definition is equally applicable to recognizing a *unique paleontological resource or site*. Additional guidance is provided in CEQA Section 15064.5 (a)(3)(D), which indicates "generally, a resource shall be considered historically significant if it has yielded, or may be likely to yield, information important in prehistory or history."

Under Section 21083.2 of the PRC, options on how to treat such resources include activities that preserve the resources in place in an undisturbed state. Other acceptable methods of mitigation under PRC Section 21083.2 include excavation and curation or study in place without excavation and curation (if the study finds that the artifacts would not meet one or more of the criteria for defining a unique archaeological resource).

3.5.1.3 Local

As stated in Section 2.6 of Chapter 2, *Project Description*, the District is exempt from the application of city and county zoning ordinances, except the proposed residential complex at Skyline College because it is a non-educational use. However, the current zoning and applicable general plan provisions for each campus are provided for informational purposes.

San Mateo County Community College District Design Standard Product Specifications Update 2015

Chapter 31 of the *San Mateo County Community College District Design Standard*s addresses earthwork, grading, and building, and it provides standards and guidelines. The District adheres to the standards administered by the DSA, which requires extensive geotechnical analysis and engineering for grading, foundations, retaining walls, and other structures, including criteria for seismic design. The seismic safety requirements for schools are more stringent than those of the CBSC.

San Mateo County Community College District Stormwater Management Program

As discussed in Section 3.8, *Hydrology and Water Quality*, the District is not subject to the MS4 Permit (Order No. 2013-0001 DWQ) that was adopted on February 5, 2013. The District has adopted a stormwater management program that aligns with Section F of the Phase II MS4 Permit. The District implements its stormwater management program on all three District campuses.

The minimum control measures include managing construction site runoff and postconstruction site runoff.

3.5.2 Environmental Setting

3.5.2.1 Regional Geology

Geologic Setting

District facilities are located in the Coast Range geomorphic province, characterized in the vicinity by generally northwest-trending, low rugged mountains and narrow valleys marked by complex folding and faulting. Geologic structures in the San Francisco Bay Area are dominated by tectonic deformation, including movement along the San Andreas fault, a right-lateral strike-slip fault that extends from the Gulf of Mexico in the south to northern California. The Pacific plate on the west side of the San Andreas fault moves north relative to the North American plate on the east side of the fault. (Advance Soil Technology 2014a, 2014b, 2014c.)

For most of the length of the San Andreas fault, basement rock on the east consists generally of Franciscan Complex of Jurassic and Cretaceous age (65–205 million years old). The rocks of the Franciscan Complex are a chaotic mixture of highly deformed sedimentary, submarine volcanic and metamorphic rocks. Overlying the basement rocks are Cretaceous marine and Tertiary (1.5–65 million years old) marine and non-marine sedimentary rocks with some continental volcanic rock. These Cretaceous and Tertiary rocks have been extensively folded and faulted over the last 25 million years as a result of movement along the San Andreas fault system. (Advance Soil Technology 2014a, 2014b, 2014c.)

Some San Mateo County hillsides contain serpentine rock or deposits of cinnabar ore. Serpentine rocks and their parent material, ultramafic rocks, are known to contain the naturally occurring form of asbestos, which can be released when the rocks are broken or crushed. Once released from rock, asbestos can become airborne and can pose significant human health risks (California Air Resources Board 2006). Similarly, disturbance of soils containing cinnabar deposits can result in release of the elemental form of mercury, which can be toxic to humans and wildlife.

Seismic Setting

Movement across the Pacific plate-North American plate boundary is distributed across several major regional faults, primarily the San Andreas, Hayward, Calaveras, and San Gregorio (**Figure 3.5-1**). Together, these are referred to as the San Andreas fault system (Advance Soil Technology 2014a, 2014b, 2014c). These faults have all been active in recent time (U.S. Geological Survey 2014).

Recent studies estimate a 63% probability of at least one earthquake with a magnitude of 7.0 or greater occurring on one of the faults of the greater San Francisco Bay Area in the next 30 years (Working Group on Northern California Earthquake Potential 2008). Advance Soil Technology

(2014a, 2014b, 2014c) notes that this estimate is likely low because only three active faults were included in the study, whereas many regional faults are capable of magnitude 6.5 or greater (refer to **Table 3.5-1**). Accordingly, it is very likely that any of the three campuses could experience at least one moderate to severe earthquake within 50 years of the proposed construction (Advance Soil Technology 2014a, 2014b, 2014c).

Table 3.5-1. Faults in the Vicinity of the Proposed Projects

Fault	Maximum Magnitude	Slip Rate (mm/year)	Distance (miles) from Cañada College	Distance (miles) from College of San Mateo	Distance (miles) from Skyline College
Calaveras (north)	6.8	6.0	23.3	27.0	28.0
Calaveras (south)	6.2	15.0	25.7	34.0	39.2
Concord–Green Valley	6.9	0.6	34.1	45.1	32.1
Greenville	6.9	2.0	36.1	35.3	37.1
Hayward (southeast extension)	6.5	3.0	20.0	16.9	33.1
Hayward (total length)	7.1	9.0	17.6	17.0	19.0
Hunting Creek–Berryessa	6.8	6.0	64.9	75.0	64.6
Monte Vista–Shannon	6.5	0.4	1.2	12.5	22.0
Monterey Bay–Tularcitos	7.1	0.5	37.1	45.8	52.5
Ortigalita	6.9	1.0	55.1	61.5	70.6
Palo Colorado Sur	6.8	3.0	44.7	51.8	59.6
Point Reyes	6.8	0.3	34.9	27.8	18.2
Rodgers Creek	7.0	9.0	44.3	44.9	32.2
San Andreas (north coast)	8.0	24.0	38.5	33.0	14.8
San Andreas (Peninsula)	7.9	24.0	0.4	1.7	0.7
San Gregorio	7.3	5.0	10.5	8.8	4.4
Sargent-Berrocal	6.8	3.0	27.6	35.4	44.4
West Napa	6.5	1.0	49.4	44.3	38.7
Zayante-Vergales	7.0	0.1	37.3	44.1	52.6

mm = millimeter(s)
Sources: Advance Soil Technology 2014a, 2014b, 2014c; U.S. Geological Survey 2014.

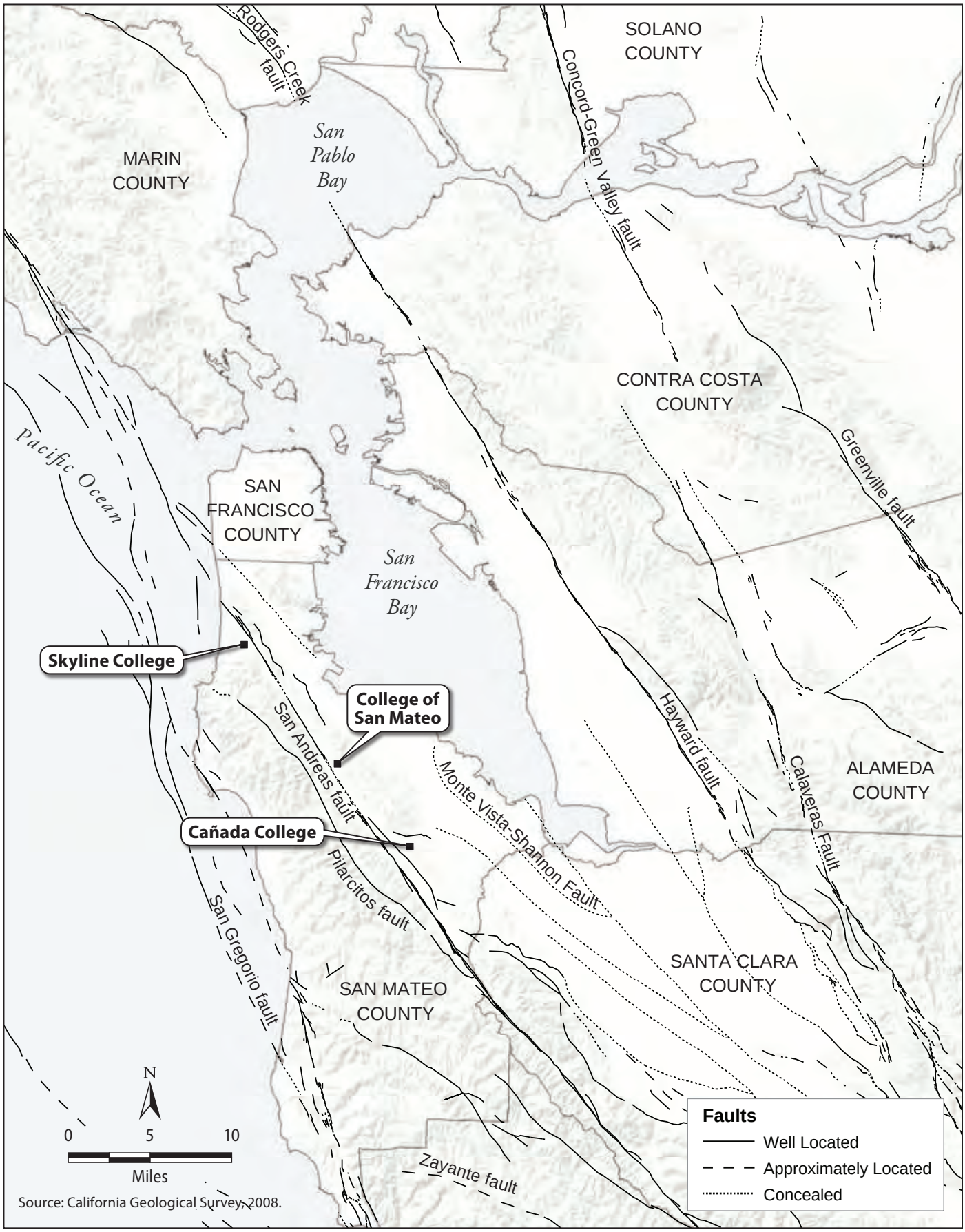
Primary Seismic Hazards

The State considers two aspects of earthquake events primary seismic hazards: surface fault rupture (disruption at the ground surface as a result of fault activity) and seismic groundshaking.

Surface Fault Rupture

Surface fault rupture is an offset of the ground surface when the fault rupture extends to the land surface. (Pacific Northwest Seismic Network n.d.). Strike-slip faults, such as the San Andreas, produce horizontal offset, whereas dip-slip faults, such as the Loma Prieta, produce vertical offset.

Some faults in the Bay Area are recognized as presenting a risk of rupturing the ground surface during an earthquake. As stated above, these are zoned under the Alquist-Priolo Act. Project-specific information is presented below in Sections 3.5.2.2 through 3.5.3.4.



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Figure 3.5-1
Major Faults in the Project Vicinity

Strong Groundshaking

Unlike surface rupture, *groundshaking* is not confined to the trace of a fault but rather propagates into the surrounding areas during an earthquake. The intensity of groundshaking typically diminishes with distance from the fault's epicenter; however, groundshaking may be locally amplified and/or prolonged by some types of substrate materials. Earthquakes along the faults presented in **Table 3.5-1** could generate strong groundshaking. Project-specific information is presented below in Sections 3.5.2.2 through 3.5.3.4.

Secondary Seismic Hazards

Secondary seismic hazards refer to seismically induced landsliding, liquefaction, and related types of ground failure. As discussed in Section 3.5.1, *Regulatory Setting*, the state maps areas that are subject to secondary seismic hazards pursuant to the Seismic Hazards Mapping Act of 1990. Project-specific information is presented below.

Liquefaction and Related Hazards

Liquefaction is the process in which soils and sediments lose shear strength and fail during seismic groundshaking. The vibration caused by an earthquake can increase pore pressure in saturated materials. If the pore pressure is raised to be equivalent to the load pressure, this causes a temporary loss of shear strength, allowing the material to flow as a fluid. This temporary condition can result in severe settlement of foundations and induce slope failure. The susceptibility of an area to liquefaction is determined largely by the depth to groundwater and the properties (e.g., texture and density) of the soil and sediment within and above the groundwater. The sediments most susceptible to liquefaction are saturated, unconsolidated sand and silt soils with low plasticity located within 50 feet of the ground surface (California Geological Survey 2008).

Lateral spreading is horizontal displacement of relatively flat alluvial material toward an open face such as an excavation, open body of water, or channel. Lateral spreading is usually associated with liquefaction. (Advance Soil Technology 2014a, 2014b, 2014c.)

Seismic settlement or *densification* can occur during strong groundshaking in loose, well sorted deposits above groundwater (such that no liquefaction occurs) and above a hard substrate, resulting in compaction.

If near-surface soil varies in composition both vertically and laterally, strong groundshaking can cause non-uniform compaction of soils, resulting in *differential settlement* (Advance Soil Technology 2014a, 2014b, 2014c).

Landslide and Other Slope Stability Hazards

Landslides are natural geologic phenomena that can be slow-moving slumps or rapid, shallow debris flows (Association of Bay Area Governments n.d.). Conditions in the Bay Area and specifically in the Project area are conducive to landslide activity. Landslides generally occur in areas of steep slopes, unconsolidated or poorly consolidated sediments, fractured bedrock, saturated soil, and/or destabilized slope bottoms. Various mechanisms can trigger landslides, among them earthquakes and heavy rainfall (Association of Bay Area Governments n.d.; Harden 1998).

Soils

Soils at the campuses include both native soils and soils that have been altered from native conditions. Site-specific conditions are described in Sections 3.5.2.2, 3.5.2.3, and 3.5.2.4.

Soils in areas of prior development are classified as one of the following.

- Orthents, cut and fill.
- Urban land.
- Orthents, cut and fill–Urban land complex (Natural Resources Conservation Service 2015).

These soil types indicate surficial soils that have been highly altered from past conditions, such as through the placement of fill to support past or existing development.

Paleontological Resources

The fossil-yielding potential of a particular area depends on the geologic age and origin of the surficial and underlying rocks. Several formations are exposed at the surface or present as bedrock on the campuses. The formations present on the campuses are listed in **Table 3.5-2**.

Table 3.5-2. Paleontological Resources and Paleontological Sensitivity on the Project Campuses

Geologic Unit	Age	Paleontological Sensitivity	Campus(s)
Merced formation	Plio-Pleistocene	High	Skyline College
Colma formation	Pleistocene	High	Skyline College
Alluvial fan and fluvial deposits	Pleistocene	High	College of San Mateo
Coarse-grained older alluvial fan and stream terrace deposits	Pleistocene	Low	Skyline College
Franciscan formation—greenstone[a]	Cretaceous and Jurassic	Low	Cañada College, College of San Mateo, Skyline College
Franciscan formation—serpentinite[a]	Cretaceous and Jurassic	Low	Cañada College, College of San Mateo
Franciscan formation—mélange[a]	Cretaceous and Jurassic	Low	College of San Mateo
Franciscan formation—sandstone[a]	Cretaceous and Jurassic	Low	Cañada College, Skyline College
Slope debris/ravine fill	Holocene	Low	Skyline College

Sources: Brabb et al. 2000; Rodda and Baghai 1993; University of California Museum of Paleontology 2015a, 2015b.

[a] Franciscan formation is exposed at the surface and is the bedrock to depth at the Project site. While marine invertebrate fossils are common in Franciscan formation, the formation is not considered to have high paleontological sensitivity. Marine invertebrate fossils are relatively common. Further, the Franciscan formation is highly deformed through fault activity.

The Twelvemile Creek area and nearby portions of Golden Gate National Recreation Area near the Skyline Campus are important fossil-yielding areas (Yancey 1973; University of California Museum of Paleontology 2015a). The Plio-Pleistocene Merced formation and the late Pleistocene Colma formation both occur in this area and have yielded numerous significant fossils (Yancey 1973; Rodda and Baghai 1993; University of California Museum of Paleontology 2015a).

The Plio-Pleistocene Merced formation is a richly fossiliferous, primarily marine deposit (Yancey 1973, University of California Museum of Paleontology 2015a). In its non-marine environment in nearby Fort Funston, the Merced formation has yielded mammoth bones and teeth as well as footprints of large canines and elk in a deposit of volcanic ash. The formation contains several ash beds. (Clifton et al. 2004.)

The late Pleistocene Colma formation has yielded complete individuals of Columbian mammoth and giant bison as well as isolated teeth and limb elements from nearby localities. Before the late Pleistocene interglacial stage (10,000–8,000 years before present), the trough along the San Andreas Fault Zone—which would eventually become San Francisco Bay—was a broad, temperate valley system dominated by grasslands and freshwater marshes. During the last Pleistocene interglacial stage, the valley system was inundated and became San Francisco Bay. Complete individuals excavated from the Colma formation at the nearby locality are estimated at 25,500 years before present. (Rodda and Baghai 1993.)

3.5.2.2 Cañada College

Geologic Setting

Topography

Cañada College is located on property that includes a hill with moderately steep sides, a level area where the new Building 1, Kinesiology/Wellness, would be built, and a gently sloping grade where the remaining buildings and parking areas are situated. The buildings are primarily on a flat area with some significant sloping between buildings, parking lots and athletic fields. A steep slope rises behind the perimeter road across the street from the Option 2 location of the Building 23, Math/Science/Engineering.

Geology

Surficial deposits at Cañada College include sandstone, greenstone, and serpentinite of the Franciscan Complex of Cretaceous and Jurassic age. In borings completed at the campus, samples from the greenstone and serpentinite were fractured and severely weathered with low hardness. Other studies have also found some Franciscan chert; hard, unsheared serpentinite; and ultramafic rocks. Borings found that the bedrock was severely weathered elements of the Franciscan Complex. (Advance Soil Technology 2014a.)

Geologic Hazards

Faults near the campus that have been identified as potential surface rupture hazards because of historical surface displacement due to rupture or creep include the San Andreas fault (Peninsula section; 0.4 mile from the campus), Monte Vista-Shannon fault (1.2 miles), and San Gregorio fault (10.5 miles) (Advance Soil Technology 2014a; California Geological Survey 2007; U.S. Geological

Survey 2014). Large earthquakes can trigger slip on adjacent faults, including those that have not yet been mapped at the surface, causing co-seismic surface rupture. However, the campus is underlain with bedrock with no prior history of surface rupture or movement during a seismic event. The risk of primary or co-seismic surface fault rupture is low.

The Cañada College campus has been mapped by the state under the Seismic Hazards Mapping Act (California Geological Survey 2008). Although faults lie near the campus, because the campus is located on a hilltop underlain with bedrock, the depth to groundwater encountered in borings was greater than 50 feet and soils were stiff, the campus would not be susceptible to liquefaction (Advance Soil Technology 2014a). Furthermore, Association of Bay Area Governments (2011) shows that the Cañada College campus is in a zone of low liquefaction risk in all of its earthquake scenarios. Risk of settlement due to liquefaction is correspondingly low.

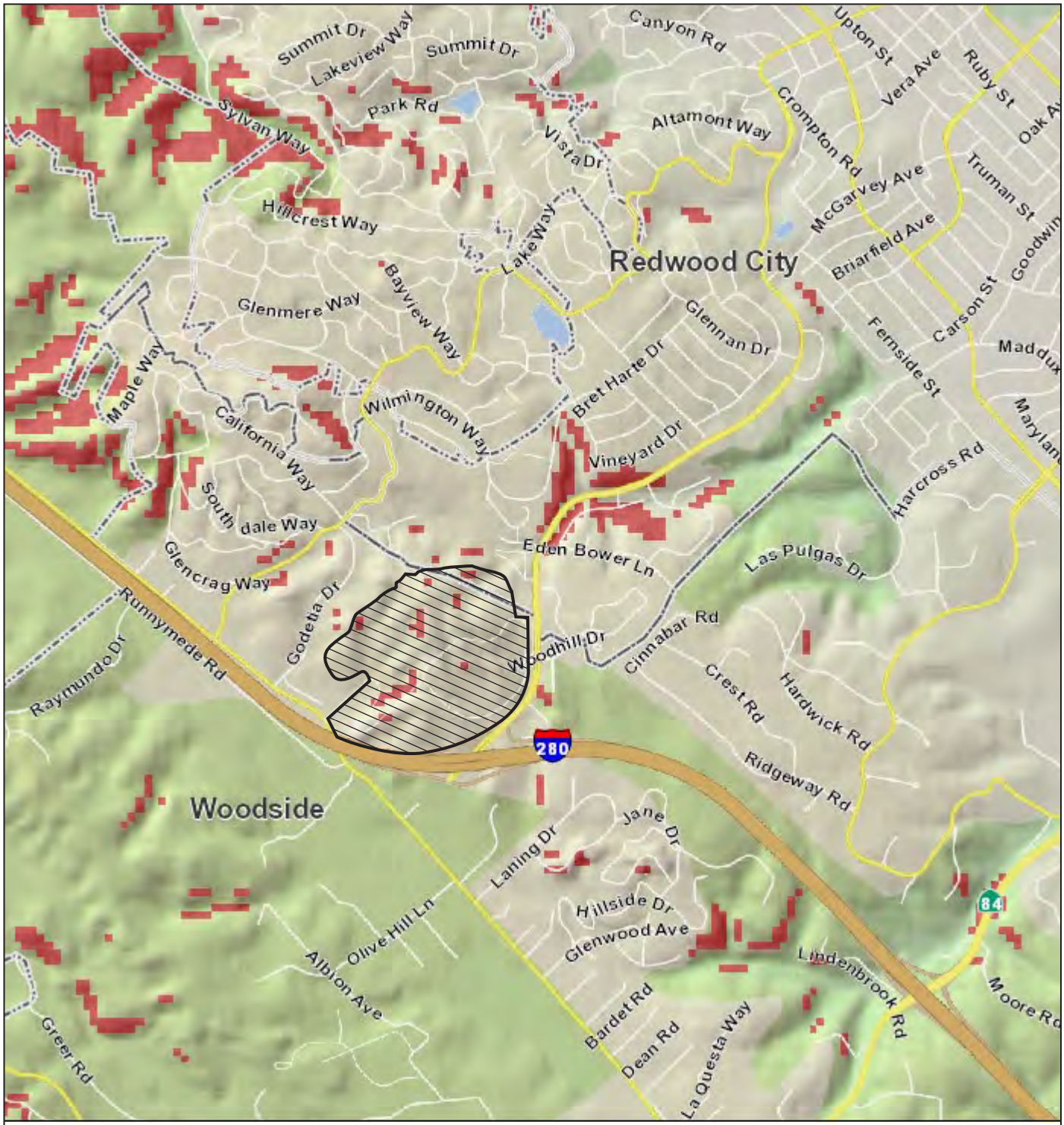
Because soils at the Cañada College campus are stiff and dense, risk of seismic settlement and differential settlement are low.

Association of Bay Area Governments (2015) shows that a debris flow source is located adjacent to the site of Building 1, Kinesiology/Wellness (**Figure 3.5-2a**). However, soils comprising the debris flow are stiff and dense, and there is no existing landslide at this adjacent site. Therefore, the risk of lateral spreading is moderate.

Although there is no existing landslide on the campus, the Cañada College campus includes debris flow sources outside Perimeter Road that could contribute to a landslide in wet conditions, particularly those exacerbated by seismic activity (Association of Bay Area Governments 2015a). Because the campus is mostly underlain with greenstone with no prior indication of slope failure and sheared mélange, the risk of landslide is low to moderate.

Soils

Soils at the Cañada College campus and their properties and features are listed in **Table 3.5-3**. All are well drained and have a depth to groundwater of greater than 50 feet (Advance Soil Technology 2014a, 2014b; Natural Resources Conservation Service 2015a).



Source: Association of Bay Area Governments, Earthquake and Hazards Program 5/22/2015.

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Figure 3.5-2a
Debris Flow Sources near Cañada College

Table 3.5-3. Soils at the Cañada College Campus

Map Unit Name	Percentage of Study Area	Corrosion of Concrete	Corrosion of Steel	Erosion Hazard (off-road, off-trail) (water)	Wind Erodibility Group[a]	Linear Extensibility[b]
Fagan loam, 15 to 50% slopes	22.3	Low	High	Moderate	6	5.7
Los Gatos loam, 30 to 75% slopes	4.8	Moderate	Low	Very severe	6	1.9
Obispo clay, 5 to 15% slopes	10.9	Low	High	Slight	4	4.5
Orthents, cut and fill, 0 to 15% slopes	4.9	Not rated	Not rated	Not rated	Not rated	Not rated
Orthents, cut and fill, 15 to 75% slopes	20.3	Not rated	Not rated	Not rated	Not rated	Not rated
Orthents, cut and fill–Urban land complex, 0 to 15% slopes	6.3	Not rated	Not rated	Not rated	Not rated	Not rated
Orthents, cut and fill–Urban land complex, 15 to 75% slopes	14.7	Not rated	Not rated	Not rated	Not rated	Not rated
Urban land	13.0	Not rated	Not rated	Not rated	Not rated	Not rated
Urban land–Orthents, cut and fill complex, 5 to 75% slopes	2.7	Not rated	Not rated	Not rated	Not rated	Not rated

Source: Natural Resources Conservation Service 2015a.

Notes:

[a] A wind erodibility group consists of soils with similar properties affecting their susceptibility to winds in cultivated areas. Soils are assigned to one of eight groups. Soils assigned to group 1 are the most susceptible to wind erosion, and soils assigned to group 8 are the least susceptible.

[b] Linear extensibility describes the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3%; moderate if 3 to 6%; high if 6 to 9%; and very high if more than 9%. If the linear extensibility is more than 3%, shrinking and swelling can damage structures.

Paleontological Resources

Rock units at Cañada College are Franciscan formation greenstone, sandstone, and serpentinite. All of these units have low paleontological sensitivity.

3.5.2.3 College of San Mateo

Geologic Setting

Topography

The College of San Mateo (CSM) is located on property that includes a hill with moderately steep sides and a level area where most buildings and parking areas are located. Perimeter Road skirts the campus and includes some moderately steep slopes accessing the campus from the surrounding area.

Geology

Surficial deposits at CSM are greenstone, serpentinite, and sheared rock (mélange) of the Franciscan Complex of Cretaceous and Jurassic age, alluvial and fluvial deposits of Pleistocene age, and artificial fill of historic age (Brabb et al. 2000).

Geologic Hazards

Faults near CSM that have been identified as potential surface rupture hazards because of historical surface displacement due to rupture or creep include the San Andreas fault (Peninsula section 1.7 miles from the campus), San Gregorio fault (8.8 miles), Monte Vista-Shannon fault (12.5 miles), and Hayward fault (17.0 miles) (California Geological Survey 2007, Advance Soil Technology 2014a, U.S. Geological Survey 2014). Large earthquakes can trigger slip on adjacent faults, including those that have not yet been mapped at the surface, causing co-seismic surface rupture. However, the campus is underlain with bedrock with no prior history of surface rupture or movement during a seismic event. The risk of primary or co-seismic surface fault rupture is low.

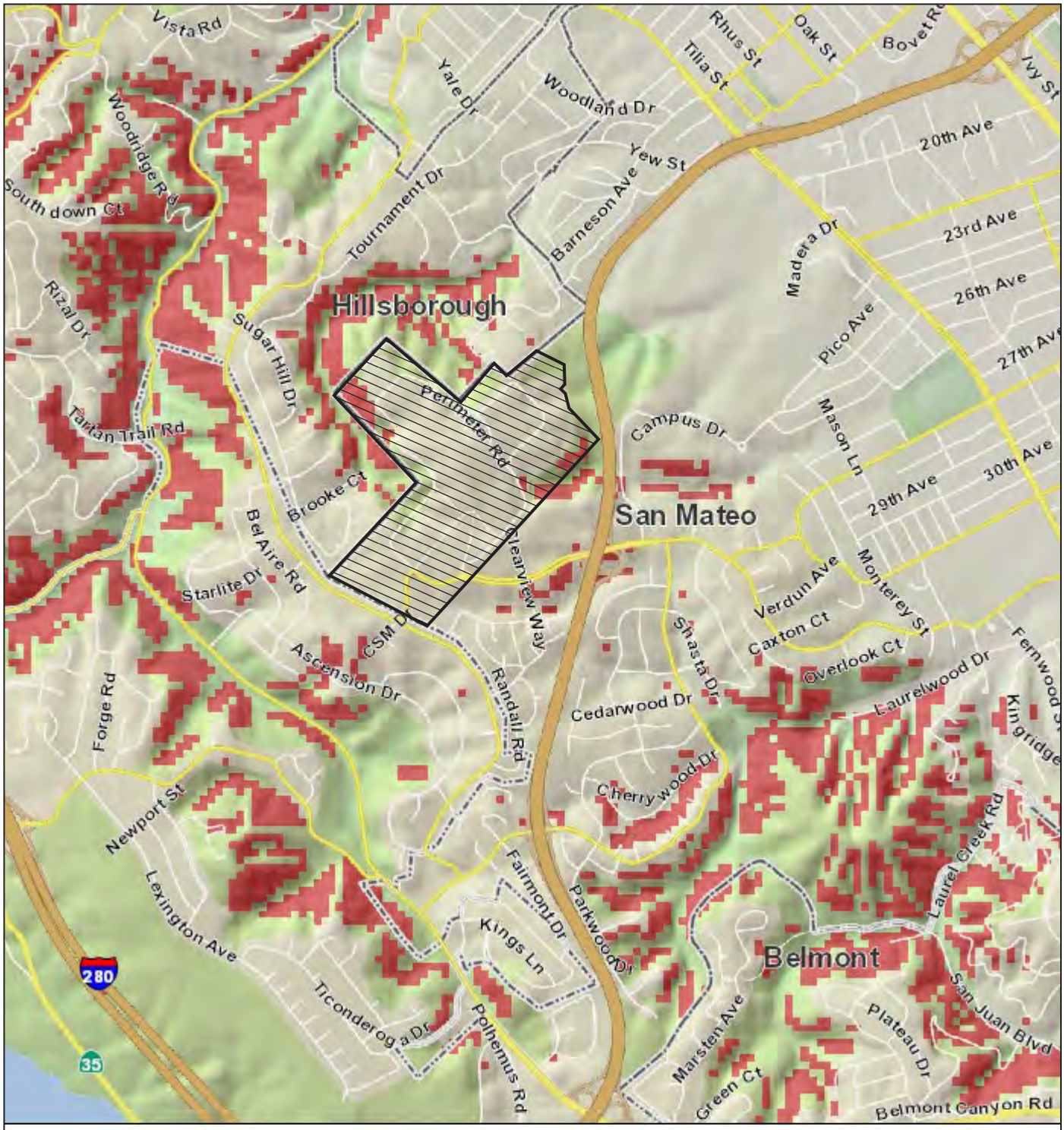
The CSM campus has been mapped under the Seismic Hazards Mapping Act. Although faults lie near the campus, because the campus is located on a hilltop with bedrock underlying the site, the depth to groundwater encountered in borings was greater than 50 feet, and soils were stiff, the campus would not be susceptible to liquefaction (Advance Soil Technology 2014a). Furthermore, Association of Bay Area Governments (2011) shows that the CSM campus is in a zone of low liquefaction risk in all of its earthquake scenarios. Risk of settlement due to liquefaction is correspondingly low. Because risk of liquefaction is low, risk of lateral spreading on this level surface is low.

Because soils at the CSM campus are stiff and dense, risk of seismic settlement and differential settlement are low.

The CSM campus includes debris flow sources that could contribute to landslide (**Figure 3.5-2b**), although there is no existing landslide on the campus (Association of Bay Area Governments 2015b). Because the campus is mostly underlain with greenstone with no prior indication of slope failure, the risk of landslide is low to moderate.

Soils

Soils at the CSM campus and their properties and features are listed in **Table 3.5-4**. All are well drained, and all have a depth to groundwater of greater than 79 inches (Natural Resources Conservation Service 2015b).



Source: Association of Bay Area Governments, Earthquake and Hazards Program 5/25/2015.

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Figure 3.5-2b
Debris Flow Sources near College of San Mateo

Table 3.5-4. Soils at the College of San Mateo Campus

Map Unit Name	Percentage of Study Area	Corrosion of Concrete	Corrosion of Steel	Erosion Hazard (off-road, off-trail) (water)	Wind Erodibility Group[a]	Linear Extensibility[b]
Fagan loam, 15 to 50% slopes	1.5	Low	High	Moderate	6	5.7
Los Gatos loam, 30 to 75% slopes	7.9	Moderate	Low	Very severe	6	1.9
Los Gatos loam, 30 to 75% slopes, MLRA 15	4.7	Moderate	Low	Severe	6	1.5
Orthents, cut and fill, 0 to 15% slopes	15.5	Not rated	Not rated	Not rated	Not rated	Not rated
Orthents, cut and fill, 15 to 75% slopes	7.7	Not rated	Not rated	Not rated	Not rated	Not rated
Orthents, cut and fill–Urban land complex, 0 to 15% slopes	4.7	Not rated	Not rated	Not rated	Not rated	Not rated
Orthents, cut and fill–Urban land complex, 15 to 75% slopes	11.1	Not rated	Not rated	Not rated	Not rated	Not rated
Urban land	46.1	Not rated	Not rated	Not rated	Not rated	Not rated
Urban land–Orthents, cut and fill complex, 5 to 75% slopes	0.8	Not rated	Not rated	Not rated	Not rated	Not rated

Source: Natural Resources Conservation Service 2015b.

Notes:

[a] A wind erodibility group consists of soils with similar properties affecting their susceptibility to winds in cultivated areas. Soils are assigned to one of eight groups. Soils assigned to group 1 are the most susceptible to wind erosion, and soils assigned to group 8 are the least susceptible.

[b] Linear extensibility describes the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3%; moderate if 3 to 6%; high if 6 to 9%; and very high if more than 9%. If the linear extensibility is more than 3%, shrinking and swelling can damage structures.

Paleontological Resources

Rock units at CSM are Franciscan formation greenstone, mélange, and serpentinite and alluvial fan and fluvial deposits of Pleistocene age. The alluvial fan and fluvial deposits of Pleistocene age have high sensitivity. However, planned construction would take place in areas of Franciscan formation which have low paleontological sensitivity.

3.5.2.4 Skyline College

Geologic Setting

Topography

Skyline College is located on a hill with a gradual approach from the inland side and a steep drop-off on the ocean side. Campus buildings and the campus perimeter drive both are built on the gentle rolling hill that forms a relatively flat area large enough for the campus. Flat deep valleys and tall peaks of the Coastal Ranges are located nearby.

Geology

Surficial deposits at Skyline College are Franciscan Complex greenstone on the ridge and slope debris/ravine fill on the slopes. The greenstone is characterized as altered basaltic volcanic rock, ranging from hard to moderately weathered to soft and highly weathered. Slope debris and ravine fill consist primarily of poorly stratified gravelly silty to sandy clay and locally silty to clayey sand or gravel (Advance Soil Technology 2014c). These formations overlie the Merced and Colma formations, which are rich in fossils (Advance Soil Technology 2014c, University of California Museum of Paleontology 2015a). Merced and Colma formations in nearby areas have produced vertebrate fossils including bison, camel, mammoth, mastodon, and ground sloth (University of California Museum of Paleontology 2015a, 2015b).

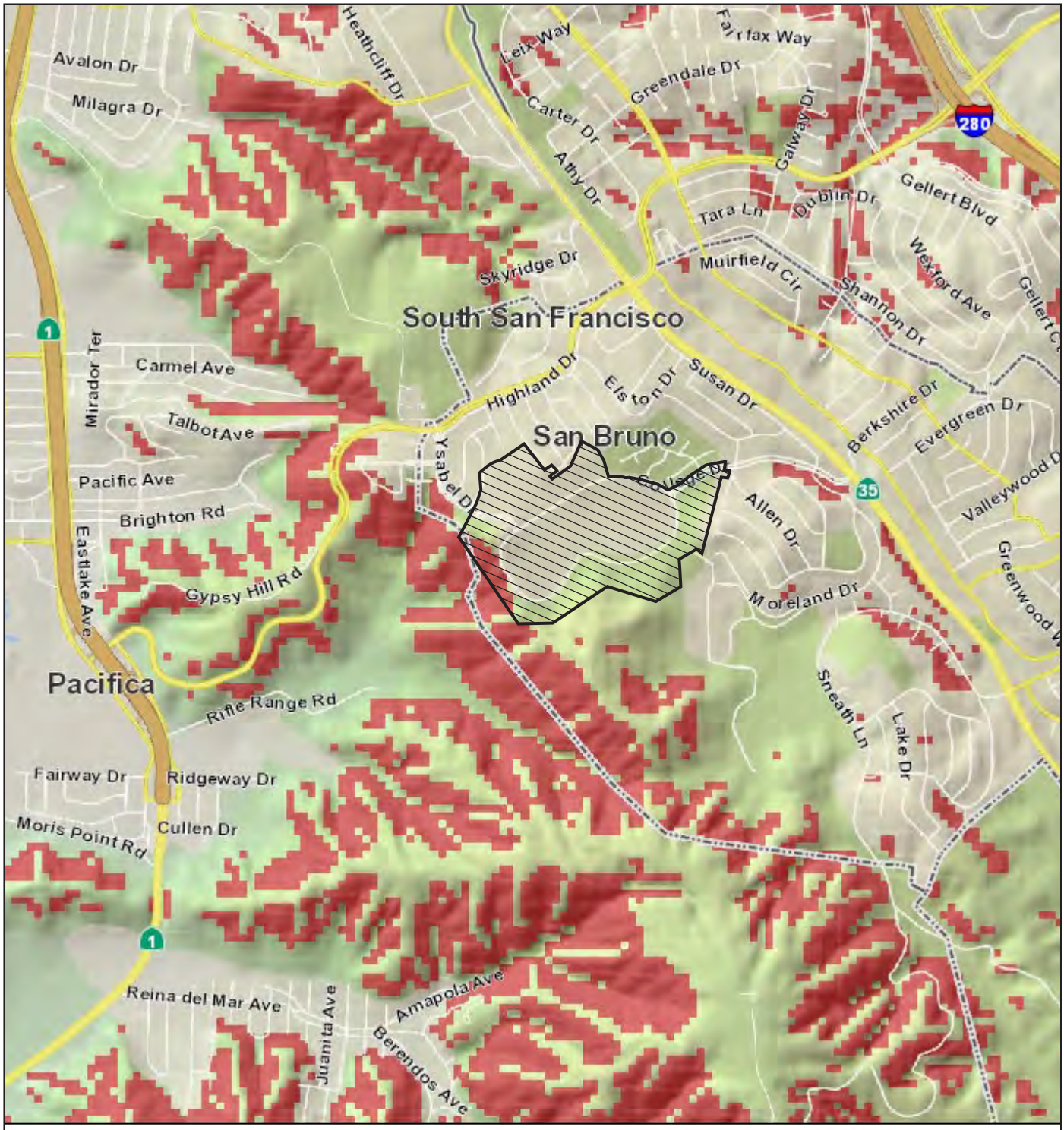
Geologic Hazards

The Skyline College campus has been mapped under the Alquist-Priolo Act (California Department of Conservation 1982). No zoned faults cross the campus. However, the San Andreas fault (Peninsula section) is located within approximately 0.7 mile of the Skyline College campus. Further, large earthquakes can trigger slip on adjacent faults, including those that have not yet been mapped at the surface, causing co-seismic surface rupture. Additional faults near the campus that have been identified as potential surface rupture hazards because of historical surface displacement due to rupture or creep include the San Gregorio fault (4.4 miles) and the Monte Vista-Shannon fault (22.0 miles) (California Geological Survey 2007; Advance Soil Technology 2014c; U.S. Geological Survey 2014). However, the campus is underlain with bedrock with no prior history of surface rupture or movement during a seismic event. The risk of primary or co-seismic surface fault rupture is low.

The Skyline College campus has been mapped under the Seismic Hazards Mapping Act. Although faults lie near the campus, because the campus is located on a hilltop underlain with bedrock, the depth to groundwater encountered in borings was greater than 50 feet, and soils were stiff, the site would not be susceptible to liquefaction (Advance Soil Technology 2014c). Furthermore, Association of Bay Area Governments (2011) shows that the Skyline College campus is in a zone of low liquefaction risk in all of its earthquake scenarios. Risk of settlement due to liquefaction is correspondingly low.

Because soils at the Skyline College campus are stiff and dense, risk of seismic settlement and differential settlement are low.

Association of Bay Area Governments (2015) shows that a debris flow source is located adjacent to Building 12, Environmental Science (**Figure 3.5-2c**). However, soils are stiff and dense, and there is no existing landslide at this site. Risk of lateral spreading accordingly is moderate.



Source: Association of Bay Area Governments, Earthquake and Hazards Program 5/25/2015.

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Figure 3.5-2c
Debris Flow Sources near Skyline College

The Skyline College campus includes one debris flow source that could contribute to landslide, although otherwise there is no existing landslide on the campus and risk of landslide is low (Association of Bay Area Governments 2015c). Because the campus in general is in a hilly area surrounded with steep slopes with no prior indication of slope failure, the risk of landslide is moderate.

Soils

Soils at the Skyline College campus and their properties and features are listed in **Table 3.5-5**. All are well drained, and all have a depth to groundwater of greater than 50 feet (Advance Soil Technology 2014c, Natural Resources Conservation Service 2015c).

Table 3.5-5. Soils at the Skyline College Campus

Map Unit Name	Percentage of Study Area	Corrosion of Concrete	Corrosion of Steel	Erosion Hazard (off-road, off-trail) (water)	Wind Erodibility Group[a]	Linear Extensibility[b]
Barnabe-Candlestick complex, 30 to 75% slopes	9.6	Low	Low	Very severe	6	1.5
Orthents, cut and fill, 0 to 15% slopes	30.3	Not rated	Not rated	Not rated	Not rated	Not rated
Orthents, cut and fill, 15 to 75% slopes	17.2	Not rated	Not rated	Not rated	Not rated	Not rated
Orthents, cut and fill–Urban land complex, 15 to 75% slopes	8/8	Not rated	Not rated	Not rated	Not rated	Not rated
Urban land	26.8	Not rated	Not rated	Not rated	Not rated	Not rated
Urban land–Orthents, cut and fill complex, 5 to 75% slopes	7.4	Not rated	Not rated	Not rated	Not rated	Not rated

Source: Natural Resources Conservation Service 2015c.

Notes:

[a] A wind erodibility group consists of soils with similar properties affecting their susceptibility to winds in cultivated areas. Soils are assigned to one of eight groups. Soils assigned to group 1 are the most susceptible to wind erosion, and soils assigned to group 8 are the least susceptible.

[b] Linear extensibility describes the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3%; moderate if 3 to 6%; high if 6 to 9%; and very high if more than 9%. If the linear extensibility is more than 3%, shrinking and swelling can damage structures.

Paleontological Resources

Rock units at the Skyline College campus are overlying Franciscan formation greenstone and sandstone, coarse-grained older alluvial fan and stream terrace deposits of Pleistocene age, and slope debris/ravine fill of Holocene age. All of these units have low paleontological sensitivity.

Underlying units are the Merced formation and the Colma formation, both of which have high sensitivity. Planned construction could take place in areas of paleontological sensitivity.

3.5.3 Impacts Analysis

3.5.3.1 Methodology

Geology and Soils

Information supporting the impact conclusions was taken from preliminary geotechnical investigations performed for proposed construction; U.S. Geological Survey, California Geological Survey, and Division of Mines and Geological mapping; and Association of Bay Area Governments Earthquake and Hazards Program analysis.

Paleontological Resources

Information supporting the impact conclusions was taken from University of California Museum of Paleontology database searches, U.S. Geological Survey mapping, and published literature.

Regarding paleontological sensitivity, the Conformable Impact Mitigation Guidelines Committee of the Society of Vertebrate Paleontology (SVP) has published Standard Guidelines in response to a recognized need to establish procedures for the investigation, collection, preservation, and cataloguing of fossil-bearing sites. The Standard Guidelines are widely accepted among paleontologists, followed by most investigators, and identify the two key phases of paleontological resource protection as (1) assessment and (2) implementation. Assessment involves identifying the potential for a project site or area to contain significant nonrenewable paleontological resources that could be damaged or destroyed by project excavation or construction. Implementation involves formulating and applying measures to reduce such adverse effects.

The SVP defines the level of potential as one of four sensitivity categories for sedimentary rocks: *High*, *Undetermined*, *Low Potential*, and *No Potential*.

- **High.** Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered … [including but not limited to] sedimentary formations and some volcaniclastic formations (e.g., ashes or tephras), and some low-grade metamorphic rocks which contain significant paleontological resources anywhere within their geographical extent, and sedimentary rock units temporarily or lithologically suitable for the preservation of fossils (e.g., middle Holocene and older, fine-grained fluvial sandstones … fine-grained marine sandstones, etc.).
- **Undetermined.** Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment…A field study by a qualified professional paleontologist…to specifically determine the paleontological resource potential of these rock units is required.
- **Low Potential.** Reports in the paleontological literature or field surveys by a qualified professional paleontologist may allow determination that some rock units have low potential for yielding significant fossils…Rock units with low potential typically will not require impact mitigation measures to protect fossils.
- **No Potential.** Some rock units have no potential to contain significant paleontological resources, for instance high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites). Rock units with no potential require no protection or impact mitigation measures. (Society of Vertebrate Paleontology 2010.)

3.5.3.2 Significance Criteria

State CEQA Guidelines Appendix G (14 California Code of Regulations 15000 et seq.) has identified significance criteria to be considered for determining whether a project could have significant impacts on existing geology and soils resources.

An impact would be considered significant if construction or operation of the Project would have any of the following consequences.

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving any of the following. (1) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault [refer to Division of Mines and Geology Special Publication 42]; (2) strong seismic groundshaking; (3) seismic-related ground failure, including liquefaction; or (4) landslides.
- Result in substantial soil erosion or the loss of topsoil.
- Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the Project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse.
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater.
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Because the Project does not involve the use of septic tanks or alternative wastewater disposal systems, there would be no impact; accordingly; the final two criteria listed above are not discussed further.

3.5.3.3 Impacts and Mitigation Measures

Cañada College

Impact CC-GEO-1: Expose people or structures to safety risks due to surface fault rupture resulting from seismic activity (less than significant)

As discussed in Section 3.5.2.2, the Cañada College campus is underlain with bedrock with no prior history of surface rupture or movement during a seismic event. Therefore, the risk of surface fault rupture at the site is considered low.

Because the risk of surface fault rupture is low, the potential for impacts related to surface fault rupture would be less than significant. No mitigation is required.

Impact CC-GEO-2: Expose people or structures to strong seismically induced groundshaking (less than significant with mitigation)

The campus is located in a seismically active area surrounded by numerous faults. A list of faults is provided in **Table 3.5-1**. Seismically induced groundshaking at the campus would depend on a number of factors.

- Size of the earthquake (magnitude).
- Distance from the site to the fault source.
- Directivity (focusing of earthquake energy along the fault in the direction of the rupture).
- Subsurface conditions.

Based on the campus' proximity to the San Andreas fault (Peninsula section, 0.4 mile from the Project site) and other faults capable of producing a large earthquake, the potential exists for a large earthquake to induce strong to very strong groundshaking at the campus during the life of the Project.

With implementation of **Mitigation Measure CC-GEO-1,** a geotechnical investigation would be required for each Project element that would involve human habitation, and Project would be required to be designed and constructed to meet the site-specific recommendations made in the geotechnical report. In addition, the Project would be designed and constructed to meet or exceed the applicable codes administered by DSA and the standards set forth by current San Mateo County Community College District Design Standards. This impact would be less than significant.

Mitigation Measure CC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Cañada College and comply with recommendations

The District will have a qualified engineer prepare design-level geotechnical investigations for each Project element involving human occupation. The geotechnical investigation report will include recommendations to ensure the building is designed in accordance with the specifications of CGS Special Publication 117, *Guidelines for Evaluating and Mitigating Seismic Hazards*, and the requirements of the Seismic Hazards Mapping Act, which will minimize the structural damage and risk to humans from seismically induced groundshaking. The District and DSA will ensure that recommendations made in the geotechnical report will be implemented as part of the Project's design and construction.

Recommendations may include considerations for design of permanent below-grade walls to resist static lateral earth pressures, lateral pressures caused by seismic activity, and traffic loads; a method for backdraining walls to prevent the buildup of hydrostatic pressure; considerations for design of excavation shoring system; excavation monitoring; and seismic design.

Impact CC-GEO-3: Expose people or structures to the effects of seismically induced ground failure, including liquefaction (less than significant)

As discussed in Section 3.5.2.2, surficial geologic conditions at the campus are not conducive to liquefaction or other seismically induced ground failure (California Geological Survey 2008; Advance Soil Technology 2014a; Association of Bay Area Governments 2011). Surveys of the campus show that soils were sufficiently dense and cohesive to resist liquefaction and that groundwater was not

present in the upper 50 feet of soils (Association of Bay Area Governments 2011). Therefore, the potential for liquefaction and lateral spreading is considered very low. The potential for differential settlement is also low because of the dense, stiff soil (Advance Soil Technology 2014a).

Impacts associated with liquefaction, lateral spreading, and differential settlement are less than significant. No mitigation is required.

Impact CC-GEO-4: Accelerate erosion during Project construction and operation (less than significant)

Construction activities include excavation and grading, which would expose soils and could result in accelerated erosion during Project construction. However, as described in Section 3.8, *Hydrology and Water Quality*, Project construction would include best management practices (BMPs), as required by the District, as well as BMPs stipulated in the SWPPP in accordance with the State Stormwater NPDES Construction General Permit, to minimize erosion and runoff during construction. These BMPs could include, but would not be limited to, using drainage swales or lined ditches to control stormwater flow and protecting storm drain inlets (with gravel bags or catch basin inserts).

Project operation would not result in erosion because the Project site would be completely developed. Stormwater runoff would be managed and collected by existing storm drains. Therefore, this impact would be less than significant. No mitigation is required.

Impact CC-GEO-5: Result in loss of topsoil from Project construction and operation (less than significant with mitigation)

Construction of the Project would include excavation and grading, which could result in loss of topsoil. Graded and excavated soils and sediments would be recompacted or reused where needed around the campus. As described in Section 2.4.6.1 in Chapter 2, *Project Description*, excavated soil is to remain on campus and would be stockpiled on the undeveloped portion of future parking lots to be used as fill to the greatest extent feasible. Implementation of **Mitigation Measure CC-GEO-2** would minimize the amount of topsoil that could be lost through removal during Project construction. Project operation would not result in significant further loss of top soil because the entire Project site would be developed. Impacts would be less than significant.

Mitigation Measure CC-GEO-2: Stockpile topsoil removed during construction at Cañada College and reuse stockpiled topsoil during revegetation

The contractor(s) retained for construction and revegetation of the Project will stockpile excavated topsoil on disturbed areas within the campus boundaries (e.g., parking lot expansion areas) so that it can be reused for revegetation on the campus as needed. To ensure maximum topsoil recovery, topsoil will be stockpiled separately from other excavated materials and covered. Revegetation and landscaping will use stockpiled topsoil.

Impact CC-GEO-6: Increase risk of landslide, liquefaction, lateral spread, subsidence, or collapse, as a result of Project location on an unstable geologic unit or soil (less than significant with mitigation)

Regarding liquefaction, as discussed under Impact CC-GEO-3, soil conditions are not conducive to liquefaction, and the groundwater table lies approximately 50 feet below ground surface. Therefore, the risk of liquefaction is considered low, as is the risk of differential settlement due to liquefaction. The impact would be less than significant.

Regarding subsidence, the Project would not significantly affect groundwater sources; thus, there would be no risk of subsidence. Soil collapse is associated with subterranean voids such as tunnels or mine shafts or with excessive loading. There are no known mine shafts on the campus. There would be no impact.

Regarding landslide, as discussed in Section 3.5.2.2, while the campus is primarily flat, there are debris flow sources immediately outside Campus Circle that could contribute to landslide. Construction of Building 23, Math/Science/Engineering (Options 1–3), is adjacent to a debris flow source (**Figure 3.5-2a**). The impact would be significant for Building 23, Math/Science/Engineering (Options 1–3).

Lateral spreading occurs when the ground spreads toward a slope. Construction activities such as excavation can introduce instability and cause slopes to collapse. During Project operation, if a structure is not designed correctly, the ground could spread toward the slope and undermine the integrity of the foundation. Because construction of Building 1, Kinesiology/Wellness, and Building 23, Option 1, Math/Science/Engineering are both adjacent to the top of a slope (**Figure 3.5-2a**), there is risk of lateral spreading during Project construction and operation. The impact would be significant for Building 1, Kinesiology/Wellness, and Building 23, Option 1, Math/Science/Engineering.

The Project would be designed and constructed to meet or exceed standards set forth by the applicable codes administered by DSA and the San Mateo County Community College District Design Standards. With implementation of **Mitigation Measure CC-GEO-1**, a geotechnical investigation would be required, and the Project would be required to be designed and constructed to meet the site-specific recommendations made in the geotechnical report. This impact would be less than significant.

Mitigation Measure CC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Cañada College and comply with recommendations

This measure is described under Impact CC-GEO-2.

Impact CC-GEO-7: Increase risk of damage to Project structures as a result of Project location on expansive soils (less than significant with mitigation)

As discussed in Section 3.5.2.2, a portion of Building 23, Math/Science/Engineering, Option 2, is located on soils with moderate shrink-swell potential (Fagan loam). The Option 1 and Option 3 locations are located on Orthents cut-and-fill that is not rated for shrink-swell potential. While Orthents are generally shallow soils that would pose no shrink-swell hazard, cut-and-fill is of unknown origin, and could contain soils with moderate or severe shrink-swell potential. To reduce impacts from potentially expansive soils, the Project would be designed and constructed to meet or exceed standards set forth by the District and current Field Act requirements administered by DSA. Implementation of **Mitigation Measure CC-GEO-1** would further require the Project to be designed and constructed to meet site-specific recommendations provided in the geotechnical report prepared for the Project. This impact would be less than significant.

Mitigation Measure CC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Cañada College and comply with recommendations

This measure is described under Impact CC-GEO-2.

Impact CC-GEO-8: Result in direct or indirect destruction of a unique paleontological resource or site or unique geologic feature (less than significant)

Site preparation would involve earthwork, such as excavation, grading, trenching, and installation of foundation piles, all of which would encounter native rock units. However, surficial and underlying rock units at the campus are of low paleontological sensitivity (refer to **Table 3.5-2**). Therefore, this impact would be less than significant. No mitigation is required.

College of San Mateo

Impact CSM-GEO-1: Expose people or structures to safety risks due to surface fault rupture resulting from seismic activity (less than significant)

As discussed in Section 3.5.2.3, the CSM campus is underlain with bedrock with no prior history of surface rupture or movement during a seismic event. Therefore, the risk of surface fault rupture at the site is considered low.

Because the risk of surface fault rupture is low, the potential for impacts related to surface fault rupture would be less than significant. No mitigation is required.

Impact CSM-GEO-2: Expose people or structures to strong seismically induced groundshaking (less than significant with mitigation)

The Project is located in a seismically active area surrounded by numerous faults. A list of faults is provided in **Table 3.5-1**. Seismically induced groundshaking at the campus would depend on a number of factors.

- Size of the earthquake (magnitude).
- Distance from the site to the fault source.
- Directivity (focusing of earthquake energy along the fault in the direction of the rupture).
- Subsurface conditions.

Based on the campus' proximity to the San Andreas fault (Peninsula section; 1.7 miles from the campus) and other faults capable of producing a large earthquake, the potential exists for a large earthquake to induce strong to very strong groundshaking at the campus during the life of the Project.

However, the Project would be designed and constructed to meet or exceed standards set forth by applicable codes and standards administered by DSA and the San Mateo County Community College District Design Standards. With implication of **Mitigation Measure CSM-GEO-1** a geotechnical investigation would be required for each Project element that would involve human habitation, and the Project would be required to be designed and constructed to meet the site-specific recommendations made in the geotechnical report. This impact would be less than significant.

Mitigation Measure CSM-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at the College of San Mateo and comply with recommendations

This measure is the same as Mitigation Measure CC-GEO-1 described under Impact CC-GEO-2, but would be implemented at the College of San Mateo.

Impact CSM-GEO-3: Expose people or structures to the effects of seismically induced ground failure, including liquefaction (less than significant)

As discussed in Section 3.5.2.3, surficial geologic conditions at the campus are not conducive to liquefaction or other seismically induced ground failure (California Geological Survey 2008; Association of Bay Area Governments 2011; Advance Soil Technology 2014a). Surveys of the campus show that soils are sufficiently dense and cohesive to resist liquefaction and that groundwater was not present in the upper 50 feet of soils (Association of Bay Area Governments 2011). Therefore, the potential for liquefaction and lateral spreading is considered very low. The potential for differential settlement is also low because of the dense, stiff soil (Advance Soil Technology 2014a).

Impacts associated with liquefaction, lateral spreading, and differential settlement are less than significant. No mitigation is required.

Impact CSM-GEO-4: Accelerate erosion during Project construction and operation (less than significant)

Construction activities include excavation and grading, which would expose soils and could result in accelerated erosion during Project construction. However, as described in Section 3.8, *Hydrology and Water Quality*, Project construction would include BMPs as required by the District and BMPs stipulated in the SWPPP in accordance with the State Stormwater NPDES Construction General Permit; these BMPs would minimize erosion and runoff during construction. These BMPs could include, but would not be limited to, using drainage swales or lined ditches to control stormwater flow and protecting storm drain inlets (with gravel bags or catch basin inserts).

Project operation would not result in erosion because the Project sites would be completely developed. Stormwater runoff on the campus would be managed and collected by existing storm drains. Stormwater runoff in the new residential development would be managed and collected by new storm drains. This impact would be less than significant. No mitigation is required.

Impact CSM-GEO-5: Result in loss of topsoil from Project construction and operation (less than significant with mitigation)

Construction of the Project would include excavation and grading, which could result in loss of topsoil. Graded and excavated soils and sediments would be recompacted or reused where needed around the Project site. As described in Section 2.4.6.1 in Chapter 2, *Project Description*, excavated soil is to remain on campus and would be stockpiled on the undeveloped portion of future parking lots to be used as fill to the greatest extent feasible. Implementation of **Mitigation Measure CSM-GEO-2** would minimize the amount of topsoil that could be lost through removal during Project construction. Project operation would not result in significant further loss of top soil because the entire Project site would be developed. This impact would be less than significant.

Mitigation Measure CSM-GEO-2: Stockpile topsoil removed during construction at the College of San Mateo and reuse stockpiled topsoil during revegetation

This measure is the same as Mitigation Measure CC-GEO-2 described under Impact CC-GEO-5, but would be implemented at the College of San Mateo.

Impact CSM-GEO-6: Increase risk of landslide, liquefaction, lateral spread, subsidence, or collapse, as a result of Project location on an unstable geologic unit or soil (less than significant)

Regarding liquefaction, as discussed under Impact CSM-GEO-3, soil conditions are not conducive to liquefaction, and the groundwater table lies approximately 50 feet below ground surface. Therefore, the risk of liquefaction is considered low, as is the risk of differential settlement due to liquefaction. The impact would be less than significant.

Regarding subsidence, the Project would not significantly affect groundwater sources; thus, there would be no risk of subsidence. Soil collapse is associated with subterranean voids such as tunnels or mine shafts or with excessive loading. There are no known mine shafts on the campus. There would be no impact.

Regarding landslide, as discussed in Section 3.5.2.3, while the campus is primarily flat, there are debris flow sources immediately outside the Perimeter Road that could contribute to landslide (refer to **Figure 3.5-2b**). However, no proposed Project construction would take place adjacent to these areas. The impact would be less than significant. No mitigation is required.

Lateral spreading occurs when the ground spreads toward a slope. Construction activities such as excavation can introduce instability and cause slopes to collapse. During Project operation, if the structure is not designed correctly, the ground could spread toward the slope and undermine the integrity of the foundation. However, no proposed Project construction would take place adjacent to these areas. The impact would be less than significant. No mitigation is required.

Impact CSM-GEO-7: Increase risk of damage to Project structures as a result of Project location on expansive soils (less than significant with mitigation)

Building 8, Gymnasium, would be constructed on Urban Land, and Building 19, the Center for Innovation and Emerging Technologies, would be constructed on Orthents, cut and fill-Urban Land complex. Neither of these soil types is rated for shrink-swell potential. Orthents are generally shallow soils that would post no shrink-swell hazard, but cut and fill and Urban Land includes fill of unknown origin which could contain soils with moderate or severe shrink-swell potential. To reduce impacts from potentially expansive soils, the Project would be designed and constructed to meet or exceed standards set forth by current Field Act requirements administered by DSA. With implementation of **Mitigation Measure CSM-GEO-1**, the Project would be required to be designed and constructed to meet site-specific recommendations provided in the geotechnical report prepared for the Project. This impact would be less than significant.

Mitigation Measure CSM-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at the College of San Mateo and comply with recommendations

This measure is the same as Mitigation Measure CC-GEO-1 described under Impact CC-GEO-2, but would be implemented at the College of San Mateo.

Impact CSM-GEO-8: Result in direct or indirect destruction of a unique paleontological resource or site or unique geologic feature (less than significant)

Site preparation would involve earthwork, such as excavation, grading, trenching, and installation of foundation piles, all of which would encounter native rock units. One rock unit at the CSM campus is of high paleontological sensitivity (refer to **Table 3.5-2**). However, proposed construction would not encounter this rock unit. This impact would be less than significant. No mitigation is required.

Skyline College

Impact SC-GEO-1: Expose people or structures to safety risks due to surface fault rupture resulting from seismic activity (less than significant)

As discussed in Section 3.5.2.4, Skyline College is not located within an Alquist-Priolo Fault Zone as designated by the California Geological Survey. The nearest fault is the San Andreas fault (Peninsula section; 0.7 mile from the campus). Therefore, the risk of surface fault rupture at the site is considered low.

Because the risk of surface fault rupture is low, the potential for impacts related to surface fault rupture would be less than significant. No mitigation is required.

Impact SC-GEO-2: Expose people or structures to strong seismically induced groundshaking (less than significant with mitigation)

The campus is located in a seismically active area surrounded by numerous faults. A list of faults is provided in **Table 3.5-1**. Seismically induced groundshaking at the campus would depend on a number of factors.

- Size of the earthquake (magnitude).
- Distance from the site to the fault source.
- Directivity (focusing of earthquake energy along the fault in the direction of the rupture).
- Subsurface conditions.

Based on the campus' proximity to the San Andreas fault (Peninsula section; 0.7 mile from the campus) and other faults capable of producing a large earthquake, the potential exists for a large earthquake to induce strong to very strong groundshaking at the campus during the life of the Project.

However, the Project would be designed and constructed to meet or exceed the applicable codes administered by DSA and the San Mateo County Community College District Design Standards. With implementation of **Mitigation Measure SC-GEO-1**, a geotechnical investigation would be required for each Project element that would involve human habitation, and the Project would be required to be designed and constructed to meet the site-specific recommendations made in the geotechnical report. This impact would be less than significant.

Mitigation Measure SC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Skyline College and comply with recommendations

This measure is the same as Mitigation Measure CC-GEO-1 described under Impact CC-GEO-2, but would be implemented at Skyline College.

Impact SC-GEO-3: Increase exposure of people or structures to the effects of seismically induced ground failure, including liquefaction (less than significant)

As discussed in Section 3.5.2.4, surficial geologic conditions at the campus are not conducive to liquefaction or other seismically induced ground failure (California Geological Survey 2008; Association of Bay Area Governments 2011; Advance Soil Technology 2014a). Surveys of the campus show that soils are sufficiently dense and cohesive to resist liquefaction and that groundwater was not present in the upper 50 feet of soils (Association of Bay Area Governments 2011). Therefore, the potential for liquefaction and lateral spreading is considered very low. The potential for differential settlement is also low because of the dense, stiff soil (Advance Soil Technology 2014a).

Impacts associated with liquefaction, lateral spreading, and differential settlement are less than significant. No mitigation is required.

Impact SC-GEO-4: Accelerate erosion during Project construction and operation (less than significant)

Construction activities include excavation and grading, which would expose soils, and could result in accelerated erosion during Project construction. However, as described in Section 3.8, *Hydrology and Water Quality*, Project construction would include BMPs as required by the District and BMPs stipulated in the SWPPP in accordance with the State Stormwater NPDES Construction General Permit; these BMPs would minimize erosion and runoff during construction. These BMPs could include, but would not be limited to, using drainage swales or lined ditches to control stormwater flow and protecting storm drain inlets (with gravel bags or catch basin inserts).

Project operation would not result in erosion because the Project sites would be completely developed. Stormwater runoff would be managed and collected by existing storm drains. This impact would be less than significant. No mitigation is required.

Impact SC-GEO-5: Result in loss of topsoil from Project construction and operation (less than significant with mitigation)

Construction of the Project would include excavation and grading, which could result in loss of topsoil. Graded and excavated soils and sediments would be recompacted or reused where needed around the campus. As described in Section 2.4.6.1 in Chapter 2, *Project Description*, excavated soil is to remain on campus and would be stockpiled on the undeveloped portion of future parking lots to be used as fill to the greatest extent feasible. Implementation of **Mitigation Measure SC-GEO-2** would minimize the amount of topsoil that could be lost through removal during Project construction. Project operation would not result in significant further loss of top soil because the entire Project site would be developed. Impacts would be less than significant.

Mitigation Measure SC-GEO-2: Stockpile topsoil removed during construction at Skyline College and reuse stockpiled topsoil during revegetation

This measure is the same as Mitigation Measure CC-GEO-2 described under Impact CC-GEO-5, but would be implemented at Skyline College.

Impact SC-GEO-6: Increase risk of landslide, liquefaction, lateral spread, subsidence, or collapse, as a result of Project location on an unstable geologic unit or soil (less than significant with mitigation)

Regarding liquefaction, as discussed under Impact SC-GEO-3, soil conditions are not conducive to liquefaction, and the groundwater table lies approximately 50 feet below ground surface. Therefore, the risk of liquefaction is considered low, as is the risk of differential settlement. The impact would be less than significant.

Regarding subsidence, the Project would not significantly affect groundwater sources; thus, there would be no risk of subsidence. Soil collapse is associated with subterranean voids such as tunnels or mine shafts or with excessive loading. There are no known mine shafts on the campus. There would be no impact.

Regarding landslides, as discussed in Section 3.5.2.4, while the campus is primarily flat, there are debris flow sources immediately outside Perimeter Road that could contribute to landslides. The planned site of Building 12, Environmental Sciences, would be set back from the top of the site of a debris flow source by at least 10 feet. The impact would be significant for Building 12.

Lateral spreading occurs when the ground spreads toward a slope. Because construction of Building 12, Environmental Sciences, would be adjacent to slopes, there would be a risk of lateral spreading during Project construction and operation. Construction activities, such as excavation, can introduce instability and cause slopes to collapse. During Project operation, if the structure is not designed correctly, the ground could spread toward the slope and undermine the integrity of the foundation. The impact would be significant for Building 12.

The Project would be designed and constructed to meet or exceed standards set forth by San Mateo County Community College District Design Standards and DSA requirements. With implementation of **Mitigation Measure SC-GEO-1**, a geotechnical investigation would be required for each Project element that would involve human habitation, and the Project would be required to be designed and constructed to meet the site-specific recommendations made in the geotechnical report. This impact would be less than significant.

Mitigation Measure SC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Skyline College and comply with recommendations

This measure is the same as Mitigation Measure CC-GEO-1 described under Impact CC-GEO-2, but would be implemented at Skyline College.

Impact SC-GEO-7: Increase risk of damage to Project structures as a result of Project location on expansive soils (less than significant with mitigation)

As discussed in Section 3.5.2.4, Building 12, Environmental Sciences, would be built on Orthents cut-and-fill, and the other Project buildings would be built on Urban Land. Neither soil type is rated for shrink-swell potential. Both Orthents cut-and-fill and Urban Land include fill of unknown origin which could contain soils with moderate or severe shrink-swell potential. To reduce impacts from potentially expansive soils, the Project would be designed and constructed to meet or exceed standards set forth by current Field Act requirements administered by the DSA. With implementation of **Mitigation Measure SC-GEO-1**, the Project would be required to be designed and constructed to meet site-specific recommendations provided in the geotechnical report prepared for the Project. This impact would be less than significant.

Mitigation Measure SC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Skyline College and comply with recommendations

This measure is the same as Mitigation Measure CC-GEO-1 described under Impact CC-GEO-2, but would be implemented at Skyline College.

Impact SC-GEO-8: Result in direct or indirect destruction of a unique paleontological resource or site or unique geologic feature (less than significant with mitigation)

Site preparation would involve earthwork, such as excavation, grading, trenching, and installation of foundation piles, all of which would encounter native rock units. Two geologic units with high paleontological sensitivity are present at Skyline College: the Merced formation and the Colma formation. Both have yielded significant fossils in nearby localities. Earthwork activities that encounter these geologic units could damage or destroy fossils. Because the Merced formation and the Colma formation have high paleontological sensitivity, this impact is significant. However, with implementation of **Mitigation Measure SC-GEO-3**, the impact would be less than significant.

Mitigation Measure SC-GEO-3: Implement procedures for identifying, evaluating, and recovering paleontological resources at Skyline College

Prior to the start of any subsurface excavations that would extend beyond previously disturbed soils, all construction forepersons and field supervisors will receive training by a qualified professional paleontologist, as defined by the Society of Vertebrate Paleontology (SVP), who is experienced in teaching non-specialists, to ensure they can recognize fossil materials and will follow proper notification procedures in the event any are uncovered during construction. Procedures to be conveyed to workers include halting construction within 50 feet of any potential fossil find and notifying a qualified paleontologist, who will evaluate its significance.

If a fossil is determined to be significant and avoidance is not feasible, the paleontologist will develop and implement an excavation and salvage plan in accordance with SVP standards. Construction work in these areas will be halted or diverted to allow recovery of fossil remains in a timely manner. Fossil remains collected during the monitoring and salvage portion of the mitigation program will be cleaned, repaired, sorted, and cataloged. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, will then be deposited in a scientific institution with paleontological collections. A final Paleontological Mitigation Plan Report will be prepared that outlines the results of the mitigation program. The District will be responsible for ensuring that monitor's recommendations regarding treatment and reporting are implemented.

3.5.3.4 Cumulative Impacts

Cumulative impacts are examined using the plan/program approach. The General Plans for the cities, town, and San Mateo County provide for future development along the San Andreas fault. There is a cumulative risk of damage from future seismic events. This risk is reduced to an acceptable level through the implementation of modern building codes and the District's design standards.

Geologic Hazards

The Project, in combination with other foreseeable development in the vicinity, would not substantially increase the risk of exposure of people or structures to geologic hazard.

Geologic hazards related to future development in the Project vicinity are site-specific and relate to the type of building and building foundation proposed, as well as the soil composition and slope on the site. These include seismic and soil hazards. Because construction on much of the land in the vicinity would involve geologic hazards, any reasonably foreseeable projects would be subject to those hazards and would therefore contribute to potential cumulative risk.

However, the Project would implement design features recommended by the Project geotechnical studies required by **Mitigation Measures CC-GEO-1, CSM-GEO-1,** and **SC-GEO-1**. With adherence to the requirements of the DSA, related plans, regulations, and design and engineering guidelines and practices, and the requirements of **Mitigation Measures CC-GEO-1, CSM-GEO-1,** and **SC-GEO-1**, the cumulative impact of the Project would be less than significant.

Soil Erosion and Loss of Topsoil

The Project, in combination with other foreseeable development in the vicinity, would not substantially increase soil erosion and loss of topsoil potential.

Soil erosion hazards related to future development in the Project vicinity (i.e., permanent loss of soil or topographic changes that can cause or exacerbate erosion) are site-specific and relate to construction practices, soil composition, and slope on the site. Soil erosion can be measured by effects on water quality; from a watershed perspective, however, erosion can affect water quality by contributing sediment. Earthwork associated with construction exposes soil surfaces and can alter soil conditions, making the soil more vulnerable to erosion by wind and water. Because any foreseeable construction faces the possibility of soil erosion and loss of topsoil, all foreseeable projects contribute to a cumulative impact.

However, to minimize the potential for cumulative erosion impacts, all projects in the District are required to conform to the provisions of applicable State regulations pertaining to erosion and sedimentation control. This includes compliance with the federal and State NPDES program and implementing required BMPs identified in the SWPPP. Because the District is responsible for ensuring the Project would be in compliance with applicable NPDES permit requirements, and would implement and maintain the BMPs required by the Project SWPPP, the cumulative impact would be less than significant.

Paleontological Resources

Construction activities on the Project site and other cumulative development could result in impacts on paleontological resources.

Impacts on paleontological resources related to future development in the Project vicinity are site-specific and relate to depth of excavation and geologic units present. All geologic units at the Cañada College and CSM sites are of low paleontological sensitivity, but those at the Skyline College site are of high sensitivity.

Accordingly, excavation activities at Skyline College could disturb sensitive geologic units and contribute to a potentially significant cumulative impact. **Mitigation Measure SC-GEO-3** prescribes discovery procedures for any previously unknown paleontological resources encountered during Project construction. The discovery procedures are consistent with professional standards and, as they pertain to discovered human remains, are compliant with state law. Compliance with these mitigation measures would reduce the Project's contribution to the cumulative impact to less than cumulatively considerable and reduce the potentially significant cumulative impacts associated with the loss paleontological resources and the disturbance of human remains to a less-than-significant level.

3.6 Greenhouse Gas Emissions

This section describes the regulatory and environmental setting for greenhouse gas (GHG) emissions. It also describes impacts on GHG emissions that would result from implementation of the project and mitigation for significant impacts where feasible and appropriate.

3.6.1 Regulatory Setting

The following regulations are relevant to GHG emissions and apply to implementation of the Project on all three campuses, unless otherwise specified.

3.6.1.1 Federal

Update to Corporate Average Fuel Economy Standards

The new Corporate Average Fuel Economy (CAFE) standards incorporate stricter fuel economy standards promulgated by the State of California into one uniform standard. Additionally, automakers are required to cut GHG emissions in new vehicles by roughly 25% by 2016.

The Environmental Protection Agency (EPA), National Highway Traffic Safety Administration (NHTSA), and California Air Resources Board (ARB) are currently working together on a joint rulemaking to establish GHG emissions standards for 2017 to 2025 model year passenger vehicles, which require an industry-wide average of 54.5 miles per gallon. The Interim Joint Technical Assessment Report for the standards evaluated four potential future standards ranging from 47 to 62 miles per gallon in 2025 (U.S. Environmental Protection Agency et al. 2011a). The official proposal was released by both EPA and NHTSA on December 1, 2011. NHTSA issued the Final Rule for CAFE Standards for Model Years 2017 and Beyond on August 28, 2012 (U.S. Environmental Protection Agency et al. 2011b).

Environmental Protection Agency Endangerment and Cause and Contribute Findings

On December 7, 2009, EPA signed the Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the CAA. Under the Endangerment Finding, EPA finds that the current and projected concentrations of the six key well-mixed GHGs—carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), perfluorinated compounds (PFCs), sulfur hexafluoride (SF_6), and hydrofluorocarbons (HFCs)—in the atmosphere threaten the public health and welfare of current and future generations. Under the Cause or Contribute Finding, EPA finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action was a prerequisite to finalizing EPA's proposed new corporate average fuel economy standards for light-duty vehicles, which EPA proposed in a joint proposal including the proposed CAFE standards (described above).

3.6.1.2 State

Executive Order S-3-05

Signed by Governor Arnold Schwarzenegger on June 1, 2005, Executive Order (EO) S-3-05 asserts that California is vulnerable to the effects of climate change. To combat this concern, Executive Order S-3-05 established the GHG emissions reduction targets listed below for state agencies.

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80% below 1990 levels.

Executive orders are binding only on state agencies. Accordingly, EO S-03-05 will guide state agencies' efforts to control and regulate GHG emissions but will have no direct binding effect on local government or private actions. The Secretary of the California EPA (CalEPA) is required to report to the Governor and state legislature biannually on the impacts of global warming on California, mitigation and adaptation plans, and progress made toward reducing GHG emissions to meet the targets established in this executive order.

Executive Order B-30-15

Governor Brown's EO B-30-15 established a medium-term goal for 2030 of reducing GHG emissions by 40% below 1990 levels and requires ARB to update its current Assembly Bill (AB) 32 Scoping Plan to identify the measures to meet the 2030 target. EO B-30-15 supports EO S-3-05, described above, but is only currently binding on state agencies. However, there are current (2015) proposals at the state legislature to adopt a legislative target for 2050 and to give ARB the authority to adopt interim and long-term binding GHG targets.

Senate Bills 1078/107/X 1-2 and Executive Order S-14-08—Renewable Portfolio Standard and Renewable Energy Resources Act

Senate Bills (SB) 1078 and 107, California's Renewable Portfolio Standard (RPS), obligated investor-owned utilities (IOUs), energy service providers (ESPs), and Community Choice Aggregations (CCAs) to procure an additional 1% of retail sales per year from eligible renewable sources until 20% is reached by no later than 2010. The California Public Utilities Commission (CPUC) and California Energy Commission (CEC) are jointly responsible for implementing the program. Subsequently, SB X 1-2, the California Renewable Energy Resources Act of 2011, obligates all California electricity providers to obtain at least 33% of their energy from renewable resources by the year 2020.

Assembly Bill 1493—Pavley Rules

Known as "Pavley I," AB 1493 standards are the nation's first GHG standards for automobiles. AB 1493 requires ARB to adopt vehicle standards that will lower GHG emissions from new light duty autos to the maximum extent feasible beginning in 2009. Additional strengthening of the Pavley standards (referred to previously as "Pavley II," now referred to as the "Advanced Clean Cars" measure) has been proposed for vehicle model years 2017–2020. Together, the two standards are expected to increase average fuel economy to roughly 43 miles per gallon by 2020 and reduce GHG

emissions from the transportation sector in California by approximately 14%. In June 2009, EPA granted California's waiver request enabling the state to enforce its GHG emissions standards for new motor vehicles beginning with the current model year.

Assembly Bill 32, California Global Warming Solutions Act

AB 32 codified the state's GHG emissions target by requiring that the state's global warming emissions be reduced to 1990 levels by 2020. Since being adopted, ARB, CEC, CPUC, and the Building Standards Commission have been developing regulations that will help meet the goals of AB 32 and Executive Order S-03-05. The Scoping Plan for AB 32 identifies specific measures to reduce GHG emissions to 1990 levels by 2020, and requires ARB and other state agencies to develop and enforce regulations and other initiatives for reducing GHGs. Specifically, the Scoping Plan articulates a key role for local governments, recommending they establish GHG reduction goals for both their municipal operations and the community consistent with those of the state.

On December 11, 2008, pursuant to AB 32, ARB adopted the Climate Change Scoping Plan. This plan outlines how emissions reductions from significant sources of GHGs will be achieved via regulations, market mechanisms, and other actions. The Climate Change Scoping Plan also describes recommended measures that were developed to reduce GHG emissions from key sources and activities while improving public health, promoting a cleaner environment, preserving our natural resources, and ensuring that the impacts of the reductions are equitable and do not disproportionately affect low-income and minority communities. These measures put the state on a path to meet the long-term 2050 goal of reducing California's GHG emissions to 80% below 1990 levels.

ARB is currently updating the Scoping Plan to include both a 2020 element and the post-2020 element. The 2020 element will focus on state, regional, and local initiatives that are being implemented now to assist us in meeting the 2020 goal. The post-2020 element will provide a high-level view of a long-term strategy for meeting the 2050 GHG goals, consistent with the goals set forth in EO S-3-05 and EO B-16-2012.

Executive Order S-01-07, Low Carbon Fuel Standard

EO S-01-07 mandates (1) that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020, and (2) that a low carbon fuel standard (LCFS) for transportation fuels be established in California. The EO initiates a research and regulatory process at ARB. Based on an implementation plan developed by CEC, ARB will be responsible for implementing the LCFS. On December 29, 2011, a federal judge issued a preliminary injunction blocking enforcement of the LCFS, ruling that the LCFS violates the interstate commerce clause (Georgetown Climate Center 2012). On July 15, 2013, the Fifth District Court of Appeals ruled to allow LCFS regulations to remain operative while ARB analyzes the smog-related impacts of LCFS implementation, including formulation of appropriate enforceable mitigation measures, and subsequently completes full CEQA review, so long as ARB attempts to meet its statutory requirements in good faith (*Poet, LLC, et al. v. California Air Resources Board, et al.*).

Senate Bill 375—Sustainable Communities Strategy

SB 375 provides for a new planning process that coordinates land use planning, regional transportation plans, and funding priorities in order to help California meet the GHG reduction goals established in AB 32. SB 375 requires regional transportation plans, developed by metropolitan

planning organizations (MPOs) to incorporate a "sustainable communities strategy" (SCS) in their Regional Transportation Plans (RTPs). The goal of the SCS is to reduce regional vehicle miles traveled (VMT) through land use planning and consequent transportation patterns. The regional targets were released by ARB in September 2010. SB 375 also includes provisions for streamlined CEQA review for some infill projects such as transit-oriented development.

MTC and ABAG adopted the Sustainable Communities Strategy as a part of the 2040 Regional Transportation Plan on July 18, 2013.

California Energy Efficiency Standards for Residential and Non-Residential Buildings—Title 24

The CEC periodically updates the energy efficiency requirements for residential and non-residential buildings. The currently applicable standards came into force in 2014.

California Green Building Standards Code—Title 24, Part 11

In January 2010, the California Building Standards Commission adopted the statewide mandatory Green Building Standards Code (CALGreen [Title 24, California Code of Regulations, Part 11]). CALGreen applies to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure.

CALGreen requires the installation of energy- and water-efficient indoor infrastructure for all new projects beginning after January 1, 2011. CALGreen also requires that newly constructed buildings develop a waste management plan (WMP) and divert at least 50% of the construction materials generated during project construction (California Green Building Standards Code [CALGreen] Sections 4.408 and 5.408).

CEC recently adopted changes to the 2013 Building Energy Efficiency Standards contained in the California Code of Regulations, Title 24, Part 6 (also known as the California Energy Code) and associated administrative regulations in CALGreen Part 11. The 2013 Building Energy Efficiency Standards are 25% more efficient than previous standards for residential construction. Part 11 also establishes voluntary standards that became mandatory in the 2010 edition of the code, including planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The standards offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses.

State CEQA Guidelines

The State CEQA Guidelines require lead agencies to describe, calculate, or estimate the amount of GHG emissions that would result from a project. Moreover, the State CEQA Guidelines emphasize the necessity to determine potential climate change effects of a project and propose mitigation as necessary. The State CEQA Guidelines confirm the discretion of lead agencies to determine appropriate significance thresholds, but require the preparation of an environmental impact report (EIR) if "there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with adopted regulations or requirements" (Section 15064.4).

State CEQA Guidelines Section 15126.4 includes considerations for lead agencies related to feasible mitigation measures to reduce GHG emissions, which may include, among others, measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's decision; implementation of project features, project design, or other measures that are incorporated into the project to substantially reduce energy consumption or GHG emissions; offsite measures, including offsets that are not otherwise required, to mitigate a project's emissions; and measures that sequester carbon or carbon-equivalent emissions.

3.6.1.3 Local

As stated in Section 2.6 of Chapter 2, *Project Description*, the District is exempt from the application of city and county zoning ordinances, except the proposed residential complex at Skyline College because it would have a non-educational use. However, the current zoning and applicable general plan provisions for each campus are provided for informational purposes.

Bay Area Air Quality Management District CEQA Guidelines

The Bay Area Air Quality Management District's (BAAQMD's) (2011) CEQA Guidelines outline advisory thresholds for stationary source and land use development projects. The mass emissions threshold for stationary source projects is 10,000 metric tons (MT) per year of carbon dioxide equivalent (CO_2e). For land use development projects, the guidelines establish three potential analysis criteria for determining project significance: compliance with a qualified Climate Action Plan (CAP), a mass emissions threshold of 1,100 MT per year of CO_2e, and a GHG efficiency threshold of 4.6 MT CO_2e per service population (Project jobs + projected residents).

The guidelines are currently not being implemented by BAAQMD pending the outcome of the California Supreme Court's decision in *California Building Industry Assoc. v. Bay Area Air Quality Management District*, in which the point at issue is whether CEQA applies to impacts of the environmental on a project. The BAAQMD guidance regarding GHG emissions is not directly at issue.

The guidelines do not identify a GHG emission threshold for construction-related emissions. However, BAAQMD recommends that GHG emissions from construction be quantified and disclosed and that a determination regarding the significance of these GHG emissions be made with respect to whether a project is consistent with the AB 32 GHG emission reduction goals. BAAQMD further recommends that BMPs be incorporated to reduce GHG emissions during construction, as feasible and applicable. BMPs may include using alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment for at least 15% of the fleet, using at least 10% of local building materials, and recycling or reusing at least 50% of construction waste or demolition materials.

Redwood City Climate Action Plan

The City's CAP (adopted in April 2013) proposes local emissions reduction strategies designed to help meet AB 32 targets. The CAP provides the emission inventory from 2005, the emission forecast for year 2020, a reduction goal for 2020, and the recommendation for GHG reduction strategies. The 2005 GHG emission inventory baseline for the city is 669,787 MT of carbon dioxide equivalent ($MTCO_2e$). Implementation of state and local GHG reduction measures, as well as all CAP reduction measures, will allow the city to achieve a 15% GHG reduction below baseline levels. This meets the reduction target of 15% below the 2005 level by 2020 described in Redwood City's adopted general plan and state guidance for GHG reductions.

The CAP Assessment Report recommends various community and municipal strategies for near-term and mid-term considerations. The emissions reduction strategies are generally focused on community actions, since more than 98% of the emissions are from community sources.

Redwood City General Plan

The general plan guides development and use of land within the city. Several goals, programs, and policies of the Urban Form and Land Use Element of the general plan apply broadly to GHG emissions, as follows.

Goal BE-1. Achieve complete and integrated neighborhoods, corridors, and centers.

Goal BE-19. Provide areas for diverse employment and business opportunities with optimum commute access.

Goal BE-22. Achieve land use patterns and development approaches that incorporate sustainability principles.

Goal BE-24. Be a regional leader with regard to sustainable development practices.

Program BE-26. Green Building Program – Implement a citywide green building program that requires innovative measures to create buildings that are more energy efficient, less water- and resource-intensive, and healthier for occupants through the Green Building Ordinance and other mechanisms.

The following goals, programs, and policies from the Circulation Element of the City's general plan pertain to the Project.

Goal BE-25. Maintain a local transportation system that balances the needs of bicyclists, pedestrians, and public transit with those of private cars.

Goal BE-26. Improve walking, bicycling, and electric bicycle/scooter facilities to be more convenient, comfortable, and safe, and therefore more common transportation modes in Redwood City.

Goal BE-27. Create conditions to improve utilization of existing public transportation services to increase ridership.

Goal BE-31. Encourage developments and implementation of strategies that minimize vehicle trips and vehicle miles traveled.

Program BE-46. New Development Shuttle Service - As part of the entitlement process for large developments, explore the feasibility of providing shuttle service to and from other transportation hubs and activity centers such as Cañada College, Caltrain Station, and Downtown.

Town of Woodside Climate Action Plan

The Town of Woodside does not currently have a CAP.

Town of Woodside General Plan

Several goals and policies from the Sustainability Element of the general plan apply broadly to GHG emissions, as follows.

Goal S1. Conserve resources.

Policy S1.1. Protect and conserve water resources.

Policy S1.2. Encourage and support renewable clean energy.

Goal S2. Reduce greenhouse gas emissions.

Policy S2.1. Encourage increased building energy efficiency.

Policy S2.2. Encourage the reuse of buildings and building materials.

Policy S2.4. Reduce vehicle trips.

Policy S2.5. Reduce carbon footprint of all town activities.

Goal S3. Encourage community education.

Policy S3.1. Encourage community programs and educational opportunities which promote sustainability.

Policy S3.2. Encourage sustainable town practices.

City of San Mateo Climate Action Plan

The City's CAP (adopted in April 2015) proposes local emissions reduction strategies designed to help meet AB 32 targets. The CAP provides the emission inventory from 2005, the emission forecast for year 2020, a reduction goal for 2020, and the recommendation for GHG reduction strategies. The 2005 GHG emission inventory baseline for the city is 804,290 $MTCO_2e$. Implementation of state and local GHG reduction measures, as well as all CAP reduction measures, will allow the city to achieve a 15% GHG reduction below baseline levels. This meets the reduction target of 15% below the 2005 level by 2020 described in the City of San Mateo's adopted general plan and state guidance for GHG reductions.

The CAP Assessment Report recommends various community and municipal strategies for near-term and mid-term considerations. The emissions reduction strategies are generally focused on community actions, since more than 98% of the emissions are from community sources.

City of San Mateo General Plan

The General Plan guides development and use of land within the City. Several goals, programs, and policies of the Land Use Element of the general plan apply broadly to GHG emissions, as follows.

Goal 1i. Consider the effects of Climate Change on the City of San Mateo. Incorporate Sustainability into the City's policies, work programs and standard operations.

Policy LU 4.32. Support programs to recycle solid waste in compliance with State requirements. Require provisions for onsite recycling for all new development.

Goal 8a. Reduce greenhouse gas emissions each year consistent with the Sustainable Initiatives Plan.

Goal 8b. Recognize potential climate change consequences such as increased sea level rise, changing weather events, less snow melt in the Sierras - therefore less drinking water availability, hotter temperatures, changing air quality and more heat related health issues.

Goal 8c. Ensure that all improvements to existing structures are developed or remodeled in a sustainable manner.

Goal 8d. Increase new annual installations of solar or renewable energy systems consistent with the Sustainable Initiatives Plan.

Goal 8e. Reduce citywide gross water consumption per capita to 102 gallons/day. Reduce the residential per capita to 70 gallons/day.

The following goals, programs, and policies from the Conservation Element of the City's general plan pertain to the Project.

Goal 3. Protect heritage trees and human-made elements of the urban environment which reflect the City's history and contribute to the quality of life.

The following goals, programs, and policies from the Circulation Element of the City's General Plan pertain to the Project.

Goal 2. Maintain a street and highway system which accommodates future growth while maintain acceptable levels of service.

Goal 3. Support the provision of public transit services adequate to provide a viable alternative to automobile travel for all citizens and to provide a convenient means of transportation to the "transit dependent" population.

Goal 4. Maintain a comprehensive bicycle and pedestrian circulation network which provides safe recreation opportunities and an alternative to automobile travel.

Goal 5. Provide an adequate parking supply for new development.

Goal 6. Implement the transportation objectives of the Sustainable Initiatives Plan (SIP) adopted by the City Council and developed by the Sustainable Advisory Committee.

City of San Bruno Climate Action Plan

The City's CAP (Public Review Draft, October 2012) proposes local emissions reduction strategies designed to help meet AB 32 targets. The CAP provides the emission inventory from 2005, the emission forecast for year 2020, a reduction goal for 2020, and the recommendation for GHG reduction strategies. The 2005 GHG emission inventory baseline for the city is 280,531 $MTCO_2e$. Implementation of state and local GHG reduction measures, as well as all CAP reduction measures, will allow the city to achieve a 15% GHG reduction below baseline levels. This meets the GHG reduction target of 15% below the 2005 level by 2020 described in San Bruno's adopted General Plan and State guidance for GHG reductions. As of June 2015, San Bruno's CAP has not been finalized.

The CAP Assessment Report recommends various community and municipal strategies for near-term and mid-term considerations. The emissions reduction strategies are generally focused on community actions, since more than 98% of the emissions are from community sources.

San Bruno General Plan

The general plan guides development and use of land within the City. The following policy of the Land Use & Urban Design Element of the general plan applies broadly to GHG emissions.

Policy LUD-J. Coordinate planning and development with surrounding cities, agencies, and San Mateo County. Work toward solutions to regional problems of traffic congestion, open space preservation, noise attenuation, environmental hazards, affordable housing, pollution, and growth management.

The following policies from the Transportation Element of the City's general plan pertain to the Project.

Policy T-A. Provide for efficient, safe, and pleasant movement for all transportation modes—vehicles, bicycles, transit, and pedestrians.

Policy T-B. Maintain acceptable levels of service for vehicular movement along the city's street network. Acceptable level of service could vary based on characteristics of the area under consideration.

Policy T-F. Provide efficient local transit—such as a shuttle system—to the BART and Caltrain stations to avoid dependence on individual motor vehicles.

Policy T-H. Expand the existing bus network to provide convenient and efficient public transit to employment centers, shopping areas, parks, and other key destinations.

Policy T-I. Develop and maintain a comprehensive bicycle network within San Bruno, providing connections to BART and Caltrain, surrounding cities, employment and shopping areas, and natural areas.

Policy T-J. Develop a safe, convenient, and continuous network of sidewalks and pedestrian paths within the city.

The following policy from the Environmental Resources Element of the City's general plan pertains to the Project.

Policy ERC-E. Contribute to regional attainment by improving ambient air quality levels within San Bruno.

The following policies from the Public Facilities Element of the City's general plan pertain to the Project.

Policy PFS-C. Ensure that the City's water supply systems are adequate to serve the city's present and anticipated needs, and that water conservation is implemented in all residences and businesses.

Policy PFS-E. Ensure that the City's solid waste collection agency provides clean and convenient garbage and recycling service

Policy PFS-J. Develop comprehensive programs to decrease energy consumption at the household, business, and City government level.

Campus Sustainability Plans

Each college included in the District—Cañada College, College of San Mateo (CSM), and Skyline College—has developed its own Sustainability Plan. Significant overlap exists among the goals of the three campus Sustainability Plans. These goals are listed below.

Goal 1. Campus and Community Awareness

Goal 2. Curriculum Development

Goal 3. Student Engagement/"Human Component"

Goal 4. The Built Environment

Goal 5. Energy Efficiency

Goal 6. Water Conservation

Goal 7. Solid Waste Management

Goal 8. Transportation

Goal 9. Sustainable Procurement

The goals and criteria established for the Sustainability Plans are to be monitored at regular intervals during plan implementation, as discussed in each respective plan.

San Mateo County Community College District Design Standards

The District has established Design Standard goals that are taken into account when designing capital projects for the District and apply broadly to GHGs and a range of sustainability goals. These goals are listed below.

Goal 1. Use an Integrated Approach to Building Design & Construction

Goal 2: Task an Ecological Site Design Approach

Goal 3. Reduce Fossil Fuel Reliance and Related Energy Costs

Goal 4. Responsibly Manage Water

Goal 5. Responsibly Source Materials

Goal 6: Maximize Occupant Comfort and Well Being

Goal 7. Reduce Waste

Goal 8. Use the Built Environment as a Teaching Tool

Goal 9. Facilitate Sustainable Management of Campus Operations

3.6.2 Environmental Setting

Unlike other resource areas that are primarily concerned with localized Project impacts (e.g., within 1,000 feet of the project site), the global nature of climate change requires a broader analysis approach. This is because of the unique chemical properties of GHGs that enable them to become well-mixed within the atmosphere and to be transported over long distances. While this section focuses on GHG emissions generated at the campuses as a result of construction and operation, the analysis considers potential regional and global GHG impacts. In this way, it is both an individual and cumulative impact analysis.

3.6.2.1 Climate Change

The phenomenon known as the *greenhouse effect* keeps the atmosphere near the Earth's surface warm enough for the successful habitation of humans and other life forms. Present in the Earth's lower atmosphere, GHGs play a critical role in maintaining the Earth's temperature; GHGs trap some of the long-wave infrared radiation emitted from the Earth's surface that would otherwise escape to space. According to AB 32, California's Global Warming Solutions Act, GHGs encompass the following gases: CO_2, CH_4, N_2O, PFCs, SF_6, and HFCs. State CEQA Guidelines (Section 15364.5) also identify these six gases as GHGs.

Visible sunlight passes through the atmosphere without being absorbed. Some of the sunlight striking the Earth is absorbed and converted to heat, which warms the surface. The surface emits infrared radiation to the atmosphere, where some of it is absorbed by GHGs and re-emitted toward the surface; some of the heat is not trapped by GHGs and escapes into space. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and amplifying the warming of the Earth (Center for Climate and Energy Solutions 2011).

Increases in fossil fuel combustion and deforestation have exponentially increased concentrations of GHGs in the atmosphere since the Industrial Revolution. Rising atmospheric concentrations of GHGs in excess of natural levels enhance the greenhouse effect, which contributes to global warming of the

Earth's lower atmosphere induces large-scale changes in ocean circulation patterns, precipitation patterns, global ice cover, biological distributions, and other changes to the Earth system that are collectively referred to as *climate change*.

The Intergovernmental Panel on Climate Change (IPCC) has been established by the World Meteorological Organization and United Nations Environment Programme to assess scientific, technical, and socioeconomic information relevant to the understanding of climate change, its potential impacts, and options for adaptation and mitigation. The IPCC estimates that the average global temperature rise between the years 2000 and 2100 could range from 1.1° Celsius, with no increase in GHG emissions above year 2000 levels, to 6.4° Celsius, with substantial increase in GHG emissions (Intergovernmental Panel on Climate Change 2007a:97–115). Large increases in global temperatures could have substantial adverse effects on the natural and human environments on the planet and in California.

3.6.2.2 Principle Greenhouse Gases Generated by the Project

The primary GHGs include CO_2, CH_4, N_2O, HFCs, and SF_6, as defined by California law; the State CEQA Guidelines contain a similar definition of GHGs (Health and Safety Code 38505(g); CEQA Guidelines Section 15364.5). Each of these gases is discussed in detail below. Because construction and operation of research and development land uses primarily generate CO_2, CH_4, N_2O, the following discussion focuses on these pollutants.

To simplify reporting and analysis, methods have been set forth to describe emissions of GHGs in terms of a single gas. The most commonly accepted method to compare GHG emissions is the global warming potential (GWP) methodology defined in the IPCC Fourth Assessment Report (AR4) reference documents (Intergovernmental Panel on Climate Change 2007a). Note that ARB is currently transitioning from the GWP values within the Second Assessment Report (SAR) (Intergovernmental Panel on Climate Change 1996) to the more recent AR4 GWPs (Intergovernmental Panel on Climate Change 2007a) as it develops estimates of GHG emissions and potential emission reductions for the Scoping Plan Update. Therefore, GWP methods from the AR4 are utilized herein. The IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of CO_2e, which compares the gas in question to that of the same mass of CO_2 (CO_2 has a global warming potential of 1 by definition).

Table 3.6-1 lists the global warming potential of several GHGs, their lifetimes, and abundances in the atmosphere.

Carbon Dioxide

CO_2 is the most important anthropogenic GHG and accounts for more than 75% of all GHG emissions caused by humans. Its atmospheric lifetime of 50–200 years ensures that atmospheric concentrations of CO_2 will remain elevated for decades even after mitigation efforts to reduce GHG concentrations are promulgated (Intergovernmental Panel on Climate Change 2007a). The primary sources of anthropogenic CO_2 in the atmosphere include the burning of fossil fuels (including motor vehicles), gas flaring, cement production, and land use changes (e.g., deforestation, oxidation of elemental carbon). CO_2 can also be removed from the atmosphere by photosynthetic organisms.

Atmospheric CO_2 has increased from a pre-industrial concentration of 280 parts per billion (ppb) to 394 parts per million (ppm) (Intergovernmental Panel on Climate Change 2007b; National Oceanic and Atmospheric Administration 2014).

Table 3.6-1. Lifetimes and Global Warming Potentials of Several Greenhouse Gases

Greenhouse Gases	Global Warming Potential (100 years)	Lifetime (years)	2014 Atmospheric Abundance
CO_2 (ppm)[a]	1	50–200	394
CH_4 (ppb)	25	12	1,893
N_2O (ppb)	298	114	326
SF_6 (ppt)[a]	22,800	3,200	7.8
HFC-23 (ppt)	14,800	270	18
HFC-134a (ppt)	1,430	14	75
HFC-152a (ppt)	124	1.4	3.9

Sources: IPCC Fourth Assessment Report: Climate Change 2007a.
CO_2 = carbon dioxide
CH_4 = methane
N_2O = nitrous oxide
SF_6 = sulfur hexafluoride
HFC = hydrofluorocarbon
ppm = parts per million by volume.
ppb = parts per billion by volume.
ppt = parts per trillion by volume.

Methane

CH_4, the main component of natural gas, is the second most abundant GHG and has a GWP of 25 (Intergovernmental Panel on Climate Change 2007b). Sources of anthropogenic emissions of CH_4 include growing rice, raising cattle, using natural gas, landfill outgassing, and mining coal (National Oceanic and Atmospheric Administration 2005). Certain land uses also function as a both a source and sink for CH_4. For example, the primary terrestrial source of CH_4 are wetlands, whereas undisturbed, aerobic soils act as a CH_4 sink (i.e., they remove CH_4 from the atmosphere).

Atmospheric CH_4 has increased from a pre-industrial concentration of 715 ppb to 1,893 ppb (Intergovernmental Panel on Climate Change 2007b; Blasing 2014).

Nitrous Oxide

N_2O is a powerful GHG, with a GWP of 298 (Intergovernmental Panel on Climate Change 2007b). Anthropogenic sources of N_2O include agricultural processes (e.g., fertilizer application), nylon production, fuel-fired power plants, nitric acid production, and vehicle emissions. N_2O also is used in rocket engines, racecars, and as an aerosol spray propellant. Natural processes, such as nitrification and denitrification, can also produce N_2O, which can be released to the atmosphere by diffusion. In the United States, more than 70% of N_2O emissions are related to agricultural soil management practices, particularly fertilizer application. N_2O concentrations in the atmosphere have increased 18% from preindustrial levels of 270 ppb to 326 ppb (Intergovernmental Panel on Climate Change 2007b; Blasing 2014).

Hydrofluorocarbons

HFCs are anthropogenic chemicals used in commercial, industrial, and consumer products and which have high GWPs (U.S. Environmental Protection Agency 2011). HFCs are generally used as substitutes for ozone-depleting substances (ODS) in automobile air conditioners and refrigerants. As seen in **Table 3.6-1**, the most abundant HFCs, in descending order, are HFC-134a, HFC-23, and HFC-152a.

HFC concentrations in the atmosphere have risen from 0 to more than 64 (HFC-134a) parts per trillion (ppt) since preindustrial times (Intergovernmental Panel on Climate Change 2007b; Carbon Dioxide Information Analysis Center 2012).

Sulfur Hexafluoride

SF_6, a human-made chemical, is used as an electrical insulating fluid for power distribution equipment, in the magnesium industry, in semiconductor manufacturing, and also as a tracer chemical for the study of oceanic and atmospheric processes (U.S. Environmental Protection Agency 2011). In 2014, atmospheric concentrations of SF_6 were 7.8 parts per trillion (ppt) and steadily increasing in the atmosphere (Blasing 2014). SF_6 is the most powerful of all GHGs listed in IPCC studies, with a GWP of 23,500 (Myhre et al. 2013).

3.6.2.3 Greenhouse Gas Emissions Inventories

A GHG inventory is a quantification of all GHG emissions and sinks within a selected physical and/or economic boundary. GHG inventories can be performed on a large scale (i.e., for global and national entities) or on a small scale (i.e., for a particular building or person). Although many processes are difficult to evaluate, several agencies have developed tools to quantify emissions from certain sources.

Table 3.6-2 outlines the most recent global, national, statewide, and local GHG inventories to help contextualize the magnitude of potential Project-related emissions.

Table 3.6-2. Global, National, State, and Local Greenhouse Gas Emissions Inventories

Emissions Inventory	CO_2e (metric tons)
2004 IPCC Global GHG Emissions Inventory	49,000,000,000
2013 EPA National GHG Emissions Inventory	6,673,000,000
2013 ARB State GHG Emissions Inventory	459,300,000
2007 SFBAAB GHG Emissions Inventory	95,800,000
2005 City of San Bruno GHG Emissions Inventory	280,531
2010 City of San Mateo GHG Emissions Inventory	734,290
2005 City of Redwood City GHG Emissions Inventory	669,787

Sources:
Intergovernmental Panel on Climate Change 2007a; U.S. Environmental Protection Agency 2014; California Air Resources Board 2015; Bay Area Air Quality Management District 2010; City of San Bruno Planning Division 2012; City of San Mateo Sustainability Department 2015; City of Redwood City 2013.
CO_2e = carbon dioxide equivalent
GHG = greenhouse gas

3.6.2.4 Impacts of Climate Change

Climate change is a complex phenomenon that has the potential to alter local climatic patterns and meteorology. Although modeling indicates that climate change will result globally and regionally in sea level rise as well as changes in climate and rainfall, among other effects, there remains uncertainty with regard to characterizing the precise local climate characteristics and predicting precisely how various ecological and social systems will react to any changes in the existing climate at the local level. Regardless of this uncertainty in precise predictions, it is widely understood that substantial climate change is expected to occur in the future, although the precise extent will take further research to define.

Consequently, Redwood City, the Town of Woodside, the city of San Mateo, and San Bruno, including the campuses, will be impacted by changing climatic conditions. Research efforts coordinated through ARB, CEC, CalEPA, the University of California system, and others are examining the specific changes to California's climate that will occur as the Earth's surface warms. Climate change could impact the natural environment in California in the following ways, among others.

- Rising sea levels along the California coastline, particularly in San Francisco and the San Joaquin Delta due to ocean expansion.
- Extreme-heat conditions, such as heat waves and very high temperatures, which could last longer and become more frequent.
- An increase in heat-related human deaths and infectious diseases, and a higher risk of respiratory problems caused by deteriorating air quality.
- Reduced snow pack and stream flow in the Sierra Nevada, affecting winter recreation and water supplies.
- Potential increase in the severity of winter storms, affecting peak stream flows and flooding.
- Changes in growing season conditions that could affect California agriculture, causing variations in crop quality and yield.
- Changes in distribution of plant and wildlife species due to changes in temperature, competition from colonizing species, changes in hydrologic cycles, changes in sea levels, and other climate-related effects.

With respect to central western California, including the campuses, climate change effects would be similar to California-wide impacts and are expected to include the following conditions (PRBO Conservation Science 2011).

- Hotter and drier climate, with average annual temperatures increasing 1.6–1.9°F by 2070 and mean annual rainfall decreasing by 61–188 millimeters.
- Sea level rise by 8.7–12.7 centimeters by 2020–2050 and by 19.2–40.9 centimeters by 2070–2099, potentially affecting or inundating coastal development.
- More frequent and intense wildfires, with the area burned projected to increase by an estimated 10–50% by 2070–2090.
- Decreases in chaparral/coastal scrub (19–43% by 2070) and blue oak woodland/foothill pine (44–55% by 2070); increases in grassland (85–140% by 2070).

- Increased salinity in the San Francisco Bay, with salinity increasing by 1–3 practical salinity units during dry years.
- Increase in estuarine flows into the San Francisco Bay estuary, with winter gains approximately balancing spring-summer losses.
- Increased heat and decreased air quality, with the result that public health will be placed at risk, native plant and animal species may be lost, and there will be an estimated 60% growth in electricity consumption.

3.6.3 Impacts Analysis

GHG emissions associated with construction and operation of the Project were quantified using standard and accepted software tools, techniques, and emission factors. A summary of the methodology is provided below. A full list of assumptions can be found in **Appendix B**, *Air Quality and Greenhouse Gas Data and Calculations*.

3.6.3.1 Methodology

Although the significance thresholds drafted by BAAQMD are not sanctioned for purposes of BAAQMD project review, the method by which BAAQMD derived these significance thresholds nonetheless provides substantial evidence for the efficacy of applying its threshold to projects within the Bay Area. In brief, the thresholds are derived from the AB 32 Scoping Plan's assignment of emissions reductions to local actions, pro-rated for the Bay Area's share of that emissions reduction. They, therefore, represent a rational approach to meeting AB 32's 2020 reduction target. CEQA Guidelines Section 15064.5 authorizes the District to adopt thresholds for GHG emissions when supported by substantial evidence (*Citizens for Responsible Equitable Environmental Development v. City of Chula Vista* [2011] 197 Cal.App.4th 327). BAAQMD's draft guidance is based on substantial evidence. Therefore, the District chooses to apply them to this Project. The thresholds are applied for purposes of determining the significance of the Project's contribution to GHG emissions.

Construction

Construction of the Project would generate short-term emissions of CO_2, CH_4, and N_2O. Emissions would originate from mobile and stationary construction equipment exhaust, employee, and haul truck vehicle exhaust, as well as through electricity and natural gas consumption. Mass emissions generated by these sources were estimated using emission factors and modeling methodologies found within the CalEEMod (version 2013.2.2) emissions inventory model, and construction information provided by the Project applicant.

Project construction is expected to consist of building demolition/construction, building renovation, and paving of parking lots and roadways, occurring between fall 2016 and spring 2027 (refer to **Appendix B** for a description of the phases for each campus). It is expected that construction would take place between fall 2016 and spring 2027 between the three campuses: Cañada College between 2016 and 2021, CSM between 2016 and 2024, and Skyline College between 2017 and 2027, with various phases of construction taking place concurrently within each campus. Total square footage of buildings to be demolished and built at each campus is shown in **Table 3.6-3**.

Table 3.6-3. Gross Square Footage (gsf) of Buildings Demolished and Built per Campus

Campus	Existing gsf	Proposed gsf
Cañada College	45,260	140,000
College of San Mateo	109,045	133,250
Skyline College	116,429	150,000

Operation

Implementation of the Project would result in community college land use on a site currently occupied by the same use. Both the existing uses and Project would result in emissions, and the analysis herein focuses on the difference in operational emissions between the Project and the existing uses. The difference in emissions is defined here as the Project's net emissions.

Operation of the Project would generate long-term emissions of CO_2, CH_4, and N_2O. Primary sources of emissions include vehicle exhaust, energy usage, water consumption, waste and wastewater generation, area sources, and onsite emergency generators.

Mass emissions generated under both existing and Project conditions from mobile and area sources, energy usage, water consumption, and waste and wastewater generation were estimated using CalEEMod (version 2013.2.2). Total student enrollment and staff employment is projected to remain constant before, during, and after construction activities so zero new vehicle trips are projected to occur at all three campuses, with respect to campus activities. Two exceptions are for the new Building 1, Kinesiology/Wellness, at Cañada College and the proposed residential complex at Skyline College.

Building 1, Kinesiology/Wellness, at Cañada College would replace the existing Gymnasium and would, in addition to being available for student, staff, and faculty use, offer membership to the general public. The current Gymnasium is for enrolled students, staff, and faculty only. The residential complex at Skyline College would consist of multi-family apartments for faculty and staff that work at any of the three campuses and single-family homes for the general public. Vehicle trip rate data for these two phases was provided by the Hexagon Transportation Consultants (Hexagon 2015), and is available in **Appendix B**.

The Project would enhance the water efficiency of the campus, thus anticipated emission reductions associated with the Project's water efficiency measures have been incorporated into the emissions modeling herein. Due to the uncertainty concerning proposed building designs and plans for each campus, proposed operational electricity and natural gas usage rates were conservatively assumed to remain constant in comparison to existing operational usage rates. Each campus is proposed to implement various renewable energy systems, including solar photovoltaic, cogeneration, and solar thermal installations. The amount of electricity generated yearly via these renewable energy sources at each campus was input into CalEEMod based on data provided by the Project applicant. In addition, the Project includes a 15% exceedance of 2013 Title 24 Energy Efficiency Standards for all new buildings to be constructed. CalEEMod allows the user to input a percentage exceedance of 2010 Title 24 Energy Efficiency Standards. According to the California Energy Commission, there is a 25% difference between 2010 and 2013 Title 24 Standards, so a 40% exceedance of 2010 Title 24 Standards was input into CalEEMod to account for the energy efficiency associated with the Project's new buildings relative to the Title 24 standards (California Energy Commission 2012).

The existing Project sites consist of buildings and parking spaces that currently generate GHG emissions associated with mobile, area, and stationary sources. The Project would replace existing uses with new and renovated buildings additional surface parking stalls, and open-space areas that would also generate long-term emissions of GHG emissions associated with mobile, area, and stationary sources but in different quantities than existing conditions. Mobile sources include those sources of emissions associated with motor vehicle trips to the Project sites. Area sources include emissions from natural gas combustion for heating requirements, landscaping activities, and consumer products. Stationary sources include emissions from onsite fuel combustion associated with emergency generators. Refer to Chapter 2, *Project Description*, for a full list of Project features.

Operational emissions associated with the existing buildings at the campus were compared to the operational emissions from the proposed buildings at the each campus. Existing operational emissions were calculated for each campus by summing the total square footage of buildings to be demolished and by inputting current electricity, natural gas, and water usage at each campus for the year 2015. The square footage of the existing building(s) input in CalEEMod for each campus was equal to the demolished square footage of the building(s) at each campus.

Proposed operational emissions were calculated for each campus by inputting the proposed electricity, natural gas, and water usage, on the Project sites for the year after construction is completed for each particular campus. The square footage of the proposed building(s) input in CalEEMod for each campus was equal to the sum total of built square footage of the building(s) at each campus.

3.6.3.2 Significance Criteria

Greenhouse Gases

The State CEQA Guidelines Appendix G (14 CCR 15000 et seq.) has identified significance criteria to be considered for determining whether a project could have significant impacts on existing GHG emissions.

An impact would be considered significant if construction or operation of the Project would have any of the following consequences.

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

BAAQMD's draft guidance is used by the District as thresholds of significance. The guidance does not identify a quantitative GHG emission threshold for construction-related emissions. Instead, the guidance recommends that GHG emissions from construction be quantified and disclosed, and that a determination regarding the significance of these GHG emissions be made with respect to whether a project is consistent with the AB 32 GHG emission reduction goals. The guidance further recommends incorporation of BMPs to reduce GHG emissions during construction, as feasible and applicable. BMPs may include use of alternative-fueled (e.g., biodiesel, electric) construction vehicles and equipment for at least 15% of the fleet, use of at least 10% of local building materials, and recycling or reusing at least 50% of construction waste or demolition materials. The District will use this approach for determining the significance of construction-related emissions.

With respect to project operations, BAAQMD's guidance identifies three potential analysis criteria for land use development projects: compliance with a qualified CAP, a mass emissions threshold of 1,100 MT per year of CO_2e, and a GHG efficiency threshold of 4.6 MT CO_2e per service population (Project jobs + projected residents). The mass emission and efficiency thresholds are based on AB 32 GHG reduction goals. Specifically, the mass emission threshold (1,100 MT CO_2e) was established based on a "gap analysis" that attributed an "appropriate share of GHG emission reductions necessary to reach AB 32 goals to new land use development projects in BAAQMD's jurisdiction that are evaluated pursuant to CEQA." Similarly, the efficiency threshold (4.6 MT CO_2e per service population) was calculated by dividing the AB 32 GHG reduction target for land use development emissions within the BAAQMD's jurisdiction (which includes San Mateo County) by the estimated 2020 population and employment of the Bay Area region (Bay Area Air Quality Management District 2010).

Emissions that would be generated by development constructed by 2020 are compared to the guidance's 1,100 MT CO_2e mass emissions threshold, as their 4.6 MT CO_2e per service population efficiency threshold is not applicable to the Project because the service population metric of Project jobs + projected residents is not applicable to the proposed project. Emissions in excess of the 1,100 MT CO_2e mass emissions threshold could impede attainment of statewide GHG reduction targets for 2020 established under AB 32. The District will use this threshold for determining the significance of operations-related emissions.

Climate Change

The California Second District Court of Appeals has held that while an EIR must analyze the environmental effects that may result from a project, an EIR is not required to examine the effects of the environment, such as sea level rise, on a project (*Ballona Wetlands Land Trust v. City of Los Angeles*, 201 Cal. App. 4th 455). In its decision, the Court called into question the validity of portions of the State CEQA Guidelines that require consideration of impacts of the environment on a project. The *Ballona* decision potentially eliminates the need for lead agencies in the second appellate district to consider the impacts of climate change on proposed projects. The *Ballona* decision did not, however, call into question the State CEQA Guidelines amendments enacted in 2010 that establish how GHG emissions are to be analyzed and mitigated under CEQA.

Until the California Supreme Court provides direction in *California Building Industry Assoc. v. Bay Area Air Quality Management District* or the state enacts legislation that overturns the *Ballona* decision, this decision is expected to be argued as precedent in CEQA cases throughout the state for the premise that CEQA does not need to examine the impacts of the environment on a project. Nonetheless, because this is an unsettled area of CEQA law, the District chooses to include a qualitative discussion of this issue in this EIR.

The qualitative discussion applies the following criterion.

- Would the Project place people or structures at substantial risk of harm due to predicted climate change effects?

3.6.3.3 Impacts and Mitigation Measures

Cañada College

Impact CC-GHG-1: Generate GHG emissions during Project construction (less than significant with mitigation)

Project construction would generate emissions of CO_2, CH_4, and N_2O from mobile and stationary construction equipment exhaust and employee and haul truck vehicle exhaust. Estimated construction emissions associated with the Project are summarized in **Table 3.6-4**. Detailed information on emissions modeling and quantification methods may be found in **Appendix B**.

Table 3.6-4. Construction Greenhouse Gas Emissions (metric tons per year)

Construction Year	CO_2e
2016	378
2017	8,257
2018	8,902
2019	5,676
2020	5,178
2021	1,275
Total Emissions[a]	*29,666*

Note: CO_2e means equivalent CO_2 emissions, which means it includes other greenhouse gas species (CH_4 and N_2O) in its calculations.

[a] Includes CH_4 and N_2O emissions.

[b] Values may not add up due to rounding.

As shown in **Table 3.6-4**, Project construction would generate approximately 29,666 MT of CO_2e during the construction period. This is equivalent to adding 6,312 typical passenger vehicles per year to the road during the construction period (U.S. Environmental Protection Agency 2005). The construction emissions are primarily the result of diesel powered construction equipment and heavy-duty haul trucks. Because construction emissions would cease once construction is complete, they are considered short-term.

As discussed above, BAAQMD's guidance does not identify a GHG emission threshold for construction-related emissions. While not established as a construction threshold, construction-related emissions associated with the Project are above the 1,100 metric ton CO_2e operational threshold. However, emissions will extend over the roughly 5-year construction period and when compared to the magnitude of operational GHG emissions are relatively insignificant. Because construction emissions are temporary, as opposed to annual, comparing construction emissions to the operational threshold represents a conservative assessment of potential impacts.

As discussed in Chapter 2, *Project Description* (Sections 2.4.5 and 2.7), the Project includes use of specialized equipment where at least 50% of projected demolition materials would be recycled on-site at each campus; and includes environmental commitment EC-AIR-1 to implement BAAQMD construction mitigation measures which include limiting idling times to five minutes or less, limiting vehicle speeds to 15 miles per hour or less, and proper equipment maintenance and tuning in accordance with manufacturer specifications. To further reduce construction-related emissions shown in **Table 3.6-4** and ensure the BAAQMD-recommended BMPs, BAAQMD's BMPs for GHG

emissions would be implemented. These include using alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment in at least 15% of the fleet and using at least 10% local building materials.

With implementation of **Mitigation Measures CC-GHG-1** and **CC-AQE-5**, this impact would be less than significant.

Mitigation Measure CC-GHG-1: Where feasible, implement BAAQMD's best management practices for GHG emissions at Cañada College

All construction contractors will implement the following BAAQMD-recommended best management practices (BMPs) to reduce GHG emissions, as applicable.

- Use alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment in at least 15% of the fleet.
- Use at least 10% local building materials.
- Recycle at least 50% of construction waste or demolition materials.

Mitigation Measure CC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Cañada College

This measure is described under Impact CC-AQE-2 in Section 3.2, *Air Quality and Energy*.

Impact CC-GHG-2: Generate GHG emissions during Project operation (less than significant)

Operation of the Project would generate direct and indirect GHG emissions. Sources of direct emissions include mobile vehicle trips, natural gas combustion, and landscaping activities. Indirect emissions would be generated by electricity generation and consumption, waste and wastewater generation, water use, and periodic testing and/or emergency use of generators onsite. Emission sinks that remove atmospheric CO_2 include trees and vegetation planted on the campus. Similar emissions sources and sinks are currently operating on the campus at the community college buildings, albeit in different quantities. The difference in operational emissions between the proposed project and the existing uses represents the net impact of the Project.

Estimated operational emissions from mobile sources associated with the new proposed Building 1, Kinesiology/Wellness, as well as projected vehicle trips to the Cañada College campus from student and staff that reside in the new residential complex at the Skyline College campus are shown in **Table 3.6-5**. It is anticipated that 50% of vehicle trips associated with the residential development at Skyline College would remain onsite at Skyline College, while the remaining trips would be split evenly between CSM and Cañada College, resulting in 25% of total trips originating from the residential development at Skyline College ending at Cañada College. Estimated operational emissions for the existing buildings that will be demolished and replaced by proposed buildings associated with the Project are summarized in **Table 3.6-6**, as well as net operational emissions (Project – existing) associated with demolished and replaced buildings. Estimated operational emissions from area, energy, water, and waste sources, excluding mobile sources, from the new Building 1, Kinesiology/Wellness, are included in the values presented in **Table 3.6-6**.

Table 3.6-5. Cañada College Operational Mobile Source Emissions (metric tons per year)

Category	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_20	CO_2e
Building 1, Kinesiology/Wellness	0	471.7	471.7	<0.1	0	472.1
Trips to Cañada College from Skyline College Residential Complex	0	12.9	12.9	<0.1	0	12.9
Total	**0**	**484.6**	**484.6**	**<0.1**	**0**	**485.0**
BAAQMD Threshold	--	--	--	--	--	*1,100*
BAAQMD Threshold Exceeded?						*No*

Bio-CO_2 = biological sources of carbon dioxide
NBio-CO_2 = non-biological sources of carbon dioxide
CO_2 = carbon dioxide
CH_4 = methane
N_2O = nitrous oxide
CO_2e = carbon dioxide equivalent

Table 3.6-6. Cañada College Net Operational Emissions for Replaced Buildings (metric tons per year)

Category	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_20	CO_2e
Existing buildings to be demolished						
Area	0	<0.1	<0.1	0	0	<0.1
Energy	0	215.8	215.8	<0.1	<0.1	216.8
Mobile	0	828.6	828.6	<0.1	0	829.2
Waste	11.9	0	11.9	0.7	0	26.8
Water	0.3	2.2	2.4	<0.1	<0.1	3.2
Total	**12.2**	**1,046.5**	**1,058.7**	**0.8**	**<0.1**	**1,076.0**
Proposed buildings to replace existing demolished buildings						
Area	0	<0.1	<0.1	<0.1	0	<0.1
Energy	0	423.6	423.6	<0.1	<0.1	425.6
Mobile	0	828.8	828.8	<0.1	0	829.5
Waste	36.9	0	36.9	2.2	0	82.8
Water	0.7	5.8	6.5	0.1	<0.1	8.6
Total	**37.7**	**1,258.1**	**1,295.8**	**2.3**	**<0.1**	**1,346.4**
Net Emissions (Proposed – Existing)	**25.4**	**211.6**	**237.1**	**1.5**	**<0.1**	**270.4**
BAAQMD Threshold	--	--	--	--	--	*1,100*
BAAQMD Threshold Exceeded?						*No*

Bio-CO_2 = biological sources of carbon dioxide
NBio-CO_2 = non-biological sources of carbon dioxide
CO_2 = carbon dioxide
CH_4 = methane
N_2O = nitrous oxide
CO_2e = carbon dioxide equivalent

The presentation of mobile source emissions separate from other operational source emissions is due to the assumption that total vehicle trips to Cañada College would not change as a result of Project implementation, excepting the increase in vehicle trips from the new Building 1, Kinesiology/Wellness. Only the new vehicle trips due to the new Building 1, Kinesiology/Wellness, are represented in **Table 3.6-5**, while all other vehicle trips to the campus are represented in **Table 3.6-6** in the category titled "Mobile." The difference in operational emissions between the Project and the existing uses represents the net impact of the Project, which is compared to BAAQMD thresholds. Operational emissions associated with the Project include emissions reductions from water use efficiency measures associated with the District's Sustainability Plan and Water Efficiency Program. Electricity and natural gas usage were conservatively assumed to remain constant (although the proposed buildings would be more energy efficient on a square footage basis than existing buildings, they would be larger). Estimated total operational emissions for the entire Cañada College campus are shown in **Table 3.6-7**.

Table 3.6-7. Cañada College Total Unmitigated Operational Emissions (metric tons per year)

Category	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_20	CO_2e
Mobile Sources (Table 3.6-5)	0	484.6	484.6	<0.1	0	485.0
Net Demolished and Replaced Building (Table 3.6-6)	25.4	211.6	237.1	1.5	<0.1	270.4
Total	**25.4**	**696.2**	**721.7**	**1.6**	**<0.1**	**755.4**
BAAQMD Threshold	--	--	--	--	--	*1,100*
BAAQMD Threshold Exceeded?						*No*

Bio-CO_2	=	biological sources of carbon dioxide
NBio-CO_2	=	non-biological sources of carbon dioxide
CO_2	=	carbon dioxide
CH_4	=	methane
N_2O	=	nitrous oxide
CO_2e	=	carbon dioxide equivalent

The current campus has physical deficiencies that trigger the need for modernization including outdated outdoor lighting and a lack energy-efficient features and require substantial energy for heating and cooling. Implementation of the Project would use energy-efficient sources to illuminate roadways, parking lots, and pedestrian paths during nighttime hours. The existing North Quad would be redeveloped to improve pedestrian circulation and connection to the Main Quad.

The Cañada College campus includes a 250 kilowatt hours (kWh) per year cogeneration system (i.e., combined heat and power). GHG benefits associated with the cogeneration installation are characterized in this analysis as an estimated 0.002% reduction in total electricity consumption associated with the proposed new buildings based on information provided by the Project applicant. An additional reduction in proposed electricity usage is due to the implementation of a 15% efficiency improvement above California Building Code Title 24 2013 Energy Efficiency Standards. This is reflected in a reduction of operational energy emissions for the proposed new buildings in **Table 3.6-6**. A solar thermal renewable energy system is proposed at Cañada College, but the efficiency and size of the system is unknown at the time of this analysis and is not included.

As shown in **Table 3.6-7**, operation of the Project is expected to result in an approximately 756 MT CO_2e increase in CO_2e emissions relative to existing conditions. Factors that led to this rise in CO_2e emissions include a roughly 85,000-square-foot expansion of total building area and the increase in

vehicle trips to the Cañada College campus due to the new publicly accessible Kinesiology/Wellness building. The existing Gymnasium is not open to the public and would be demolished and replaced by the new Building 1, Kinesiology/Wellness. Note that energy-related emissions under Project conditions are anticipated to increase, mainly due to the increase in total square footage of buildings on campus relative to existing conditions. However, the proposed renewable energy installations on Campus, the exceedance of Title 24 2013 Energy Efficiency Standards, the use of more fuel efficient vehicles in future vehicle model years as assumed by CalEEMod default values, and a 25% decrease from 2013 water usage rates per square-foot of building helped to minimized the increase in CO_2e emissions associated with the campus.

As previously discussed, BAAQMD has established a mass emissions threshold of 1,100 MT CO_2e/year. **Table 3.6-7** indicates project emissions would not exceed this threshold. The impact would be less than significant. No mitigation is required.

Impact CC-GHG-3: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (less than significant)

As described under Impact CC-GHG-2, operation of the Project is expected to result in an increase in emissions which would be below the BAAQMD thresholds (**Table 3.6-7**).

As discussed in Section 3.6.1.2, *State Regulatory Setting*, the state has adopted AB 32, pursuant to which ARB has established the state's GHG emissions reduction targets for the future. Consistency with AB 32 is evaluated in this impact.

ARB adopted the AB 32 Scoping Plan as a framework for achieving AB 32. The Scoping Plan outlines a series of technologically feasible and cost-effective measures to reduce statewide GHG emissions. Some reductions will need to come in the form of changes pertaining to vehicle emissions and mileage standards. Some will come from changes pertaining to sources of electricity and increased energy efficiency at existing facilities. The remainder will need to come from plans, policies, or regulations that will require new facilities to have lower carbon intensities than they have under business as usual (BAU) conditions.

As discussed in Chapter 2, *Project Description*, the Project includes a number of energy efficiency and transportation demand management (TDM) measures that will contribute to long-term GHG reductions. For example, the Project includes use of energy-efficient sources to illuminate roadways, parking lots, and pedestrian paths during nighttime hours, as well as advanced energy efficiency design approaches, pedestrian improvements, potential renewable energy installations, water use reduction, and onsite recycling of concrete building materials. All new building construction, except the residential complex at Skyline College, would target LEED Gold certification, and all new modernization and renovation projects would exceed the California Building Code Title 24 2013 Energy Efficiency Standards by at least 15%. Project-related measures are consistent with strategies identified in the AB 32 Scoping Plan, as well as statewide goals to conserve energy and support transit-oriented neighborhood design.

Each campus has a Sustainability Plan that includes the college's visions, goals, and objectives for sustainability, as well as strategies to meet these goals. The proposed facility improvements at each of the campuses would be consistent with the visions, goals, and objectives in the respective Sustainability Plans. Based on the review of Project design features and estimated operational GHG emissions, implementation of the Project is not expected to conflict with AB 32.

Implementation of the Project would result in an increase in GHG emissions relative to existing conditions but would be below the mass emissions threshold of 1,100 MT CO_2e/year which was developed to help lead agencies achieve the GHG emissions reduction goals of AB 32. As such, the Project would be consistent with the AB 32 goal of reducing statewide GHG emissions to 1990 levels by 2020. The Project would not conflict with this GHG emissions-reduction plan. The impact would be less than significant. No mitigation is required.

Impact CC-GHG-4: Subject property and persons to otherwise avoidable physical harm as a result of inevitable climate change (less than significant)

As discussed above, several impacts to the environment are expected throughout California as a result of global climate change. The extent of these effects is still being defined as climate modeling tools become more refined. Regardless of the uncertainty in precise predictions, it is widely understood that substantial climate change is expected to occur in the future. Potential climate change impacts in the Bay Area include sea level rise, extreme heat events, increased water and energy consumption, and changes in species distribution and range.

The National Oceanic Atmospheric Administration (NOAA) has developed a series of interactive maps identifying areas vulnerable to various levels of sea level rise. According to NOAA, sea level rise from the San Francisco Bay would not inundate portions of the Cañada College campus under current mean water height and two sea level rise conditions—1 foot (12 inches) and 6 feet (72 inches). Accordingly, sea level rise is not anticipated to intrude upon the Project or pose a substantial risk to future students or users of the campus.

In addition to sea level rise, a range of other potential climate change impacts may affect the Project, including increased temperatures and heat stress days. However, the Project would not exacerbate these issues; rather, energy efficiency strategies associated with the Project could reduce potential heat-related climate change impacts on area residents. Likewise, while regional water supplies are subject to potential future climate change effects that could impact water supplies, the Project includes water-efficiency measures that would help alleviate demand for scarce statewide water resources. The impact would be less than significant. No mitigation is required.

College of San Mateo

Impact CSM-GHG-1: Generate GHG emissions during Project construction (less than significant with mitigation)

Project construction would generate emissions of CO_2, CH_4, and N_2O from mobile and stationary construction equipment exhaust and employee and haul truck vehicle exhaust. Estimated construction emissions associated with the Project are summarized in **Table 3.6-8**. Detailed information on emissions modeling and quantification methods may be found in **Appendix B**.

Table 3.6-8. Construction Greenhouse Emissions (metric tons per year)

Construction Year	CO_2e
2016	112
2017	5,734
2018	8,507
2019	5,532
2020	2,854
2021	1,778
2022	2,677
2023	2,317
2024	439
Total Emissions[a]	*29,950*

Note: CO_2e means equivalent CO_2 emissions, which means it includes other greenhouse gas species (CH_4 and N_2O) in its calculations.
[a] Includes CH_4 and N_2O emissions.
[b] Values may not add up due to rounding.

As shown in **Table 3.6-8**, Project construction would generate approximately 29,950 MT of CO_2e during the construction period. This is equivalent to adding 6,372 typical passenger vehicles per year to the road during the construction period (U.S. Environmental Protection Agency 2005). The construction emissions are primarily the result of diesel powered construction equipment and heavy-duty haul trucks. Because construction emissions would cease once construction is complete, they are considered short-term.

As discussed above, BAAQMD's guidance does not identify a GHG emission threshold for construction-related emissions. While not established as a construction threshold, construction-related emissions associated with the Project are above the 1,100 metric ton CO_2e operational threshold. However, emissions will extend over the approximately 8-year construction period and when compared to the magnitude of operational GHG emissions are relatively insignificant. Because construction emissions are temporary, as opposed to annual, comparing construction emissions to the operational threshold represents a conservative assessment of potential impacts.

As discussed in Chapter 2, *Project Description* (Sections 2.4.5 and 2.7), the Project includes use of specialized equipment where at least 50% of projected demolition materials would be recycled on-site at each campus; and includes environmental commitment EC-AIR-1 to implement BAAQMD construction mitigation measures which include limiting idling times to five minutes or less, limiting vehicle speeds to 15 miles per hour or less, and proper equipment maintenance and tuning in accordance with manufacturer specifications. To further reduce construction-related emissions shown in **Table 3.6-8** and ensure construction-related GHG emissions are consistent with the City's CAP and BAAQMD-recommended BMPs, BAAQMD's BMPs for GHG emissions would be implemented. These include using alternative-fueled (e.g. biodiesel, electric) construction vehicles/equipment in at least 15% of the fleet and using at least 10% local building materials.

With implementation of **Mitigation Measures CSM-GHG-1** and **CSM-AQE-5**, this impact would be less than significant.

Mitigation Measure CSM-GHG-1: Where feasible, implement BAAQMD's best management practices for GHG emissions at College of San Mateo

This mitigation is the same as Mitigation Measure CC-GHG-1 described under Impact CC-GHG-1, but would be implemented at the College of San Mateo.

Mitigation Measure CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at College of San Mateo

This measure is described under Impact CC-AQE-2 in Section 3.2, *Air Quality and Energy*, but would be implemented at the College of San Mateo.

Impact CSM-GHG-2: Generate GHG emissions during Project operation (less than significant)

Operation of the Project would generate direct and indirect GHG emissions. Sources of direct emissions include mobile vehicle trips, natural gas combustion, and landscaping activities. Indirect emissions would be generated by electricity generation and consumption, waste and wastewater generation, water use, and periodic testing and/or emergency use of generators onsite. Emission sinks that remove atmospheric CO_2 include trees and vegetation planted on the campus. The difference in operational emissions between the existing uses and the proposal represents the net impact of the Project.

Estimated operational emissions from mobile sources associated with the vehicle trips to CSM from the new residential complex at the Skyline College campus are shown in **Table 3.6-9**. It is anticipated that 50% of vehicle trips associated with the residential development at Skyline College would remain onsite at Skyline College, while the remaining trips would be split evenly between CSM and Cañada College, resulting in 25% of total trips originating from the residential development at Skyline College ending at CSM. Estimated operational emissions for the existing buildings that will be demolished and replaced by proposed buildings associated with the Project are summarized in **Table 3.6-10**, as well as net operational emissions (Project – existing) associated with demolished and replaced buildings. The difference in operational emissions between the Project and the existing uses represents the net impact of the Project, which is compared to BAAQMD thresholds. Operational emissions associated with the Project include emissions reductions from water use efficiency measures. Electricity and natural gas usage were conservatively assumed to remain constant. Estimated total operational emissions for the entire CSM campus are shown in **Table 3.6-11**.

Table 3.6-9. College of San Mateo Operational Mobile Source Emissions (metric tons per year)

Category	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_20	CO_2e
Trips to College of San Mateo from Skyline College Residential Complex	0	8.0	8.0	<0.1	0	8.0
BAAQMD Threshold	--	--	--	--	--	*1,100*
BAAQMD Threshold Exceeded?						*No*

Bio-CO_2 = biological sources of carbon dioxide
NBio-CO_2 = non-biological sources of carbon dioxide
CO_2 = carbon dioxide
CH_4 = methane
N_2O = nitrous oxide
CO_2e = carbon dioxide equivalent

Table 3.6-10. College of San Mateo Unmitigated Net Operational Building Emissions (metric tons per year)

Category	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_20	CO_2e
Existing						
Area	0	<0.1	<0.1	0	0	<0.1
Energy	0	702.2	702.2	<0.1	<0.1	705.8
Mobile	0	2,354.8	2,354.8	0.1	0	2,357.2
Waste	28.8	0	28.8	1.7	0	64.5
Water	0.6	6.8	7.4	0.1	<0.1	9.3
Total	**29.4**	**3,063.8**	**3,093.2**	**1.9**	**<0.1**	**3,136.8**
Proposed						
Area	0	<0.1	<0.1	0	0	<0.1
Energy	0	298.3	298.3	<0.1	<0.1	300.2
Mobile	0	1,943.1	1,943.1	0.1	0	1,944.5
Waste	35.2	0	35.2	2.1	0	78.8
Water	0.8	8.4	9.2	0.1	<0.1	11.4
Total	**35.9**	**2,249.8**	**2,285.7**	**2.2**	**<0.1**	**2,335.0**
Net Emissions (Proposed – Existing)	**6.5**	**-814.0**	**-807.5**	**0.3**	**<0.1**	**-801.8**
BAAQMD Threshold	--	--	--	--	--	*1,100*
BAAQMD Threshold Exceeded?						*No*

Bio-CO_2 = biological sources of carbon dioxide
NBio-CO_2 = non-biological sources of carbon dioxide
CO_2 = carbon dioxide
CH_4 = methane
N_2O = nitrous oxide
CO_2e = carbon dioxide equivalent

Table 3.6-11. College of San Mateo Total Unmitigated Operational Emissions (metric tons per year)

Category	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_20	CO_2e
Trips to College of San Mateo from Skyline College Residential Complex (Table 3.6-9)	0	8.0	8.0	<0.1	0	8.0
Net Building Emissions (Table 3.6-10)	6.5	-814.0	-807.5	0.3	<0.1	-801.8
Total	**6.5**	**-806.0**	**-799.5**	**0.3**	**<0.1**	**-793.8**
BAAQMD Threshold	--	--	--	--	--	*1,100*
BAAQMD Threshold Exceeded?						*No*

Bio-CO_2 = biological sources of carbon dioxide
NBio-CO_2 = non-biological sources of carbon dioxide
CO_2 = carbon dioxide
CH_4 = methane
N_2O = nitrous oxide
CO_2e = carbon dioxide equivalent

The CSM campus includes renewable energy installations such as photovoltaic (PV), solar thermal, and cogeneration systems (i.e., combined heat and power). Solar renewable energy (PV or solar thermal) could be located at Lots 1, 2, and/or 9 as panels over the current parking (which would also provide shade) or on the roof tops of Buildings 5 and/or 8. Cogeneration/renewable energy would likely be located at Building 7, Facilities Maintenance Center, at the location of the now decommissioned cogeneration plant. GHG benefits associated with the solar thermal installations are not characterized in this analysis, as their size and efficiency is unknown at the time of this analysis. However, an 800,000 kWh per year solar PV system as well as a 250 kWh per year cogeneration system would be implemented at CSM. GHG benefits associated with the PV and cogeneration installations are characterized in this analysis as an estimated 60% reduction in electricity usage from total electricity usage of the proposed new buildings based on information provided by the Project applicant. An additional reduction in proposed electricity usage is due to the implementation of a 15% efficiency improvement above California Building Code Title 24 2013 Energy Efficiency Standards. This is reflected in a reduction of operational energy emissions for the proposed new buildings in **Table 3.6-10**.

As shown in **Table 3.6-11**, operation of the Project is expected to result in an approximately 794 $MTCO_2e$ decrease in CO_2e emissions relative to existing conditions. However, the proposed renewable energy installations on campus, the exceedance of Title 24 2013 Energy Efficiency Standards, the use of more fuel efficient vehicles in future vehicle model years as assumed by CalEEMod default values, and a 25% decrease from 2013 water usage rates per square-foot of building helped to minimized the increase in CO_2e emissions associated with the campus.

As previously discussed, BAAQMD has established a mass emissions threshold of 1,100 MT CO_2e/year. **Table 3.6-11** indicates Project emissions would not exceed this threshold, and impacts are considered less than significant. No mitigation is required.

Impact CSM-GHG-3: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (less than significant)

As described under Impact CSM-GHG-2, operation of the Project is expected to result in a decrease in emissions which would be below the BAAQMD thresholds (**Table 3.6-11**).

As discussed in Section 3.6.1.2, *State Regulatory Setting*, the state has adopted AB 32, which codifies the state's GHG emissions reduction targets for the future. Consistency with AB 32 is evaluated in this impact.

As discussed above for Impact CC-GHG-3, ARB adopted the AB 32 Scoping Plan as a framework for achieving AB 32, the District has a Sustainability Plan for each campus, and the Project includes a number of energy efficiency and TDM measures that would contribute to long-term GHG reductions (refer to Section 2.4.5 in Chapter 2, *Project Description*).

Based on the review of Project design features and estimated operational GHG emissions, implementation of the Project is not expected to conflict with AB 32.

Implementation of the Project would result in a decrease in GHG emissions, relative to existing conditions and would be below the mass emissions threshold of 1,100 MT CO_2e/year, which was both developed to help lead agencies achieve the GHG emissions reduction goals of AB 32. As such, the Project would be consistent with the AB 32 goal of reducing statewide GHG emissions to 1990 levels by 2020. The Project would not conflict with this GHG emissions-reduction plan. The impact would be less than significant. No mitigation is required.

Impact CSM-GHG-4: Subject property and persons to otherwise avoidable physical harm as a result of inevitable climate change (less than significant)

As discussed above, several impacts to the environment are expected throughout California as a result of global climate change. The extent of these effects is still being defined as climate modeling tools become more refined. Regardless of the uncertainty in precise predictions, it is widely understood that substantial climate change is expected to occur in the future. Potential climate change impacts in the Bay Area include sea level rise, extreme heat events, increased water and energy consumption, and changes in species distribution and range.

NOAA has developed a series of interactive maps identifying areas vulnerable to various levels of sea level rise. According to NOAA, sea level rise from the San Francisco Bay would not inundate portions of the CSM campus under current mean water height and two sea level rise conditions—1 foot (12 inches) and 6 feet (72 inches). Accordingly, sea level rise is not anticipated to intrude upon the Project or pose a substantial risk to future students or users of the campus.

In addition to sea level rise, a range of other potential climate change impacts may affect the Project, including increased temperatures and heat stress days. However, the Project would not exacerbate these issues; rather, energy efficiency strategies associated with the Project could reduce potential heat-related climate change impacts on area residents. Likewise, while regional water supplies are subject to potential future climate change effects that could impact water supplies, the Project includes water-efficiency measures that would help alleviate demand for scarce statewide water resources. The impact would be less than significant. No mitigation is required.

Skyline College

Impact SC-GHG-1: Generate GHG emissions during Project construction (less than significant with mitigation)

Project construction would generate emissions of CO_2, CH_4, and N_2O from mobile and stationary construction equipment exhaust and employee and haul truck vehicle exhaust. Estimated construction emissions associated with the Project are summarized in **Table 3.6-12**. Detailed information on emissions modeling and quantification methods may be found in **Appendix B**.

As shown in **Table 3.6-12**, Project construction would generate approximately 22,783 MT of CO_2e during the construction period. This is equivalent to adding 4,847 typical passenger vehicles per year to the road during the construction period (U.S. Environmental Protection Agency 2005). The construction emissions are primarily the result of diesel powered construction equipment and heavy-duty haul trucks. Because construction emissions would cease once construction is complete, they are considered short-term.

As discussed above, BAAQMD's guidance does not identify a GHG emission threshold for construction-related emissions. While not established as a construction threshold, construction-related emissions associated with the Project are above the 1,100 metric ton CO_2e operational threshold. However, emissions will extend over the roughly 11-year construction period and, when compared to the magnitude of operational GHG emissions, are relatively insignificant. Because construction emissions are temporary, as opposed to annual, comparing construction emissions to BAAQMD's operational threshold represents a conservative assessment of potential impacts.

Table 3.6-12. Construction Greenhouse Gas Emissions (metric tons per year)

Construction Year	CO_2e
2016	0.0
2017	895
2018	3,375
2019	5,325
2020	3,147
2021	2,492
2022	1,812
2023	1,825
2024	1,202
2025	1,635
2026	957
2027	118
Total Emissions[a]	*22,783*

Note: CO_2e means equivalent CO_2 emissions, which means it includes other greenhouse gas species (CH_4 and N_2O) in its calculations.

[a] Includes CH_4 and N_2O emissions.

[b] Values may not add up due to rounding.

As discussed in Chapter 2, *Project Description* (Sections 2.4.5 and 2.7), the Project includes use of specialized equipment where at least 50% of projected demolition materials would be recycled on-site at each campus; and includes environmental commitment EC-AIR-1 to implement BAAQMD construction mitigation measures which include limiting idling times to five minutes or less, limiting vehicle speeds to 15 miles per hour or less, and proper equipment maintenance and tuning in accordance with manufacturer specifications. To further reduce construction-related emissions shown in **Table 3.6-12** and ensure construction-related GHG emissions are consistent with the City's CAP and BAAQMD-recommended BMPs, BAAQMD's BMPs for GHG emissions would be implemented. These include using alternative-fueled (e.g. biodiesel, electric) construction vehicles/equipment in at least 15% of the fleet and using at least 10% local building materials.

With implementation of **Mitigation Measures SC-GHG-1** and **SC-AQE-5**, this impact would be less than significant.

Mitigation Measure SC-GHG-1: Where feasible, implement BAAQMD's best management practices for GHG emissions at Skyline College

This mitigation is the same as Mitigation Measure CC-GHG-1 described under Impact CC-GHG-1, but would be implemented at Skyline College.

Mitigation Measure SC-AQE-4: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Skyline College

This measure is described under Impact CC-AQE-2 in Section 3.2, *Air Quality and Energy,* but would be implemented at Skyline College.

Impact SC-GHG-2: Generate GHG emissions during Project operation (less than significant)

Operation of the Project would generate direct and indirect GHG emissions. Sources of direct emissions include mobile vehicle trips, natural gas combustion, and landscaping activities. Indirect emissions would be generated by electricity generation and consumption, waste and wastewater generation, water use, and periodic testing and/or emergency use of generators on-site. Emission sinks that remove atmospheric CO_2 include trees and vegetation planted on the campus. Similar emissions sources and sinks are currently operating on the Project site, albeit in different quantities. The difference in operational emissions between the Project and the existing uses represents the net impact of the Project.

Estimated operational emissions for the existing buildings that would be demolished and operational emissions for the proposed buildings that would replace the demolished buildings are summarized in **Table 3.6-13**. Estimated net operational emissions (Project – existing), are summarized as well in **Table 3.6-13**. The difference in operational emissions between the Project and the existing uses represents the net impact of the Project, which is compared to BAAQMD thresholds. Estimated operational emissions from area, energy, water, and waste sources, excluding mobile sources, from the new residential complex are included in the values shown in **Table 3.6-13**. Estimated operational emissions from mobile sources associated with the proposed residential complex are shown in **Table 3.6-14**. It is anticipated that 50% of vehicle trips associated with the residential development at Skyline College would remain onsite at Skyline College, while the remaining trips would be split evenly between CSM and Cañada College. Operational emissions associated with the Project include emissions reductions from water use efficiency measures. Electricity and natural gas usage were conservatively assumed to remain constant. Estimated total operational emissions for the entire Skyline College campus are shown in **Table 3.6-15**.

The Project could include renewable energy installations such as PV, solar thermal, or cogeneration (i.e., combined heat and power). The renewable energy installations could be located within or on the roofs at Building 1/1A and/or Building 15, Career and Sustainable Technology. Equipment would either be placed within building structures or enclosures. GHG benefits associated with the solar thermal installations are not characterized in this analysis as their size and efficiency were unknown at the time of this analysis. However, a 200,000 kWh per year solar PV system as well as a 250 kWh per year cogeneration system would be implemented at Skyline College. GHG benefits associated with the PV and cogeneration installations are characterized in this analysis as an estimated 9% reduction in electricity usage from total electricity usage of the proposed new buildings based on information provided by the Project applicant. This is reflected in a reduction of operational energy emissions for the proposed new buildings in **Table 3.6-13**.

As shown in **Table 3.6-15**, operation of the Project is expected to result in an approximately 248 $MTCO_2e$ increase in CO_2e emissions relative to existing conditions. Factors that led to this rise in CO_2e emissions include a roughly 140,000-square-foot expansion of total building area and the increase in vehicle trips to the Cañada College and CSM campuses due to the new residential complex. Factors that helped offsite this increase include the proposed renewable energy installations on campus, the exceedance of Title 24 2013 Energy Efficiency Standards, the use of more fuel efficient vehicles in future vehicle model years as assumed by CalEEMod default values, and a 25% decrease from 2013 water usage rates per square-foot of building.

As previously discussed, BAAQMD has established a mass emissions threshold of 1,100 MT CO_2e/year. **Table 3.6-15** indicates project emissions would not exceed this threshold, and impacts are considered less than significant. No mitigation is required.

Table 3.6-13. Skyline College Unmitigated Net Operational Building Emissions (metric tons per year)

Category	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_20	CO_2e
Existing						
Area	0	<0.1	<0.1	0	0	<0.1
Energy	0	626.1	626.1	<0.1	<0.1	629.3
Mobile	0	2,514.1	2,514.1	0.1	0	2,516.7
Waste	30.7	0	30.7	1.8	0	68.9
Water	0.4	3.2	3.6	<0.1	<0.1	4.8
Total	**31.1**	**3,143.5**	**3,174.6**	**2.0**	**<0.1**	**3,219.6**
Proposed						
Area	0	<0.1	<0.1	<0.1	0	<0.1
Energy	0	791.0	791.0	<0.1	<0.1	795.0
Mobile	0	2,074.8	2,074.8	0.1	0	2,076.4
Waste	68.2	0	68.2	4.0	0	152.9
Water	0.9	7.4	8.3	0.1	<0.1	10.9
Total	**69.1**	**2,873.2**	**2,942.3**	**4.2**	**<0.1**	**3,035.3**
Net Emissions (Proposed – Existing)	**38.0**	**-270.3**	**-232.3**	**2.2**	**<0.1**	**-184.3**
BAAQMD Threshold	--	--	--	--	--	*1,100*
BAAQMD Threshold Exceeded?						*No*

Bio-CO_2 = biological sources of carbon dioxide
NBio-CO_2 = non-biological sources of carbon dioxide
CO_2 = carbon dioxide
CH_4 = methane
N_2O = nitrous oxide
CO_2e = carbon dioxide equivalent

Table 3.6-14. Skyline College Unmitigated Operational Residential Trip Emissions (metric tons per year)

Category	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_20	CO_2e
Trips to Cañada	0	12.9	12.9	<0.1	0	12.9
Trips to CSM	0	8.0	8.0	<0.1	0	8.0
Trips Offsite	0	407.3	407.3	<0.1	0	407.6
Trips Onsite	0	4.0	4.0	<0.1	0	4.0
Total	**0**	**432.1**	**432.1**	**<0.1**	**0**	**432.4**
BAAQMD Threshold	--	--	--	--	--	*1,100*
BAAQMD Threshold Exceeded?						*No*

Bio-CO_2 = biological sources of carbon dioxide
NBio-CO_2 = non-biological sources of carbon dioxide
CO_2 = carbon dioxide
CH_4 = methane
N_2O = nitrous oxide
CO_2e = carbon dioxide equivalent

Table 3.6-15. Skyline College Total Unmitigated Operational Emissions (metric tons per year)

Category	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_20	CO_2e
Residential Trips (Table 3.6-14)	0	432.1	432.1	<0.1	0	432.4
Net Building Emissions (Table 3.6-13)	38.0	-270.3	-232.3	2.2	<0.1	-184.3
Total	**38.0**	**161.8**	**199.8**	**2.2**	**<0.1**	**248.1**
BAAQMD Threshold	--	--	--	--	--	*1,100*
BAAQMD Threshold Exceeded?						*No*

Bio-CO_2 = biological sources of carbon dioxide
NBio-CO_2 = non-biological sources of carbon dioxide
CO_2 = carbon dioxide
CH_4 = methane
N_2O = nitrous oxide
CO_2e = carbon dioxide equivalent

Impact SC-GHG-3: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (less than significant)

Operation of the Project is expected to result in an increase in emissions which would be below the BAAQMD thresholds (**Table 3.6-15**).

As discussed above for Impact CC-GHG-3, ARB adopted the AB 32 Scoping Plan as a framework for achieving AB 32, the District has a Sustainability Plan for each campus, and the Project includes a number of energy efficiency and TDM measures that will contribute to long-term GHG reductions (refer to Section 2.4.5 in Chapter 2).

Based on the review of Project design features and estimated operational GHG emissions, implementation of the Project is not expected to conflict with AB 32.

Implementation of the Project would result in an increase in GHG emissions relative to existing conditions, but would be below BAAQMD's mass emissions threshold of 1,100 MT CO_2e/year, which was both developed to help lead agencies achieve the GHG emissions reduction goals of AB 32. As such, the Project would be consistent with the AB 32 goal of reducing statewide GHG emissions to 1990 levels by 2020. The Project would not conflict with this GHG emissions-reduction plan. The impact would be less than significant. No mitigation is required.

Impact SC-GHG-4: Subject property and persons to otherwise avoidable physical harm as a result of inevitable climate change (less than significant)

As discussed above, several impacts to the environment are expected throughout California as a result of global climate change. The extent of these effects is still being defined as climate modeling tools become more refined. Regardless of the uncertainty in precise predictions, it is widely understood that substantial climate change is expected to occur in the future. Potential climate change impacts in the Bay Area include sea level rise, extreme heat events, increased water and energy consumption, and changes in species distribution and range.

NOAA has developed a series of interactive maps identifying areas vulnerable to various levels of sea level rise. According to NOAA, sea level rise from the San Francisco Bay would not inundate portions of the Skyline College campus under current mean water height and two sea level rise conditions—1

foot (12 inches) and 6 feet (72 inches). Accordingly, sea level rise is not anticipated to intrude upon the Project or pose a substantial risk to future students, residents of the new residential complex, or other users of the campus.

In addition to sea level rise, a range of other potential climate change impacts may affect the Project, including increased temperatures and heat stress days. However, the Project would not exacerbate these issues; rather, energy efficiency strategies associated with the Project could reduce potential heat-related climate change impacts on area residents. Likewise, while regional water supplies are subject to potential future climate change effects that could impact water supplies, the Project includes water-efficiency measures that would help alleviate demand for scarce statewide water resources. The impact would be less than significant. No mitigation is required.

3.6.3.4 Cumulative Impacts

As described in Section 3.6.2, *Environmental Setting*, the unique chemical properties of GHGs enable them to become well-mixed within the atmosphere and transported over long distances.

BAAQMD has identified project-level thresholds to evaluate climate change impacts which the District will use for the Project's cumulative impact analysis. In developing these thresholds, BAAQMD considered levels at which Project emissions would be cumulatively considerable in light of the ARB Scoping Plan's target for GHG emissions reductions from local actions. As noted in the BAAQMD guidance (2011):

> GHG emissions and global climate change also represent cumulative impacts. GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. Climate change impacts may include an increase in extreme heat days, higher concentrations of air pollutants, sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental impacts. No single project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contribute substantially to the phenomenon of global climate change and its associated environmental impacts. BAAQMD's approach to developing a Threshold of Significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move us towards climate stabilization. If a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact, and would be considered significant.

BAAQMD's GHG thresholds, therefore, represent the maximum emissions the entirety of Project (i.e., the combined emissions of Cañada College, CSM, and Skyline College) may generate before contributing to a cumulative impact on global climate change. Therefore, exceeding the mass emissions threshold of 1,100 MT CO_2e/year would be cumulatively considerable for the entire Project consisting of Project-related activities at all three campuses.

Greenhouse Gas Emissions during Project Construction

As described above, Project construction would generate emissions of CO_2, CH_4, and N_2O from mobile and stationary construction equipment exhaust and employee and haul truck vehicle exhaust. Estimated total construction emissions associated with the Project, including all three campuses, are summarized in **Table 3.6-16**.

Table 3.6-16. San Mateo County Community College District Total Unmitigated Construction Emissions (metric tons)

Campus	CO_2e
Cañada College	29,666
College of San Mateo	29,950
Skyline College	22,782
Total	**82,398**

Bio-CO_2	=	biological sources of carbon dioxide
NBio-CO_2	=	non-biological sources of carbon dioxide
CO_2	=	carbon dioxide
CH_4	=	methane
N_2O	=	nitrous oxide
CO_2e	=	carbon dioxide equivalent

As shown in **Table 3.6-16**, Project construction would generate approximately 82,398 MT of CO_2e during the construction period. This is equivalent to adding 17,531 typical passenger vehicles per year to the road during the construction period (U.S. Environmental Protection Agency 2005). The construction emissions are primarily the result of diesel powered construction equipment and heavy-duty haul trucks. Because construction emissions would cease once construction is complete, they are considered short-term.

As discussed above, BAAQMD's guidance does not identify a GHG emission threshold for construction-related emissions. While not established as a construction threshold, construction-related emissions associated with the Project are above the 1,100 metric ton CO_2e operational threshold. However, emissions will extend over the roughly 11-year construction period and when compared to the magnitude of operational GHG emissions are relatively insignificant. Because construction emissions are temporary, as opposed to annual, comparing construction emissions to the operational threshold represents a conservative assessment of potential impacts. Moreover, as discussed in Section 3.6.3.3, *Impacts and Mitigation Measures* with **Mitigation Measures CC-GHG-1, CSM-GHG-1,** and **SC-GHG-1**, the Project incorporates feasible BMPs. These BMPs will further reduce construction-related emissions shown in **Table 3.6-16**. Accordingly, the Project is not expected to generate a significant amount of construction-related emissions. This impact would be less than significant.

Greenhouse Gas Emissions during Project Operation

Project operation would generate direct and indirect GHG emissions (**Table 3.6-17**). Sources of direct emissions include mobile vehicle trips, natural gas combustion, landscaping activities, and emergency generator testing and use. Indirect emissions would be generated by electricity generation and consumption, waste and wastewater generation, and water use. Emission sinks that remove atmospheric CO_2 include trees and vegetation planted on the campus. Similar emissions sources and sinks are currently operating on the campus at the community college buildings. Emissions generated by these uses represent existing conditions (i.e., the baseline), against which the Project is evaluated. The difference in operational emissions between the Project and the existing land uses represents the net impact of the Project (**Table 3.6-17**). Project operation is expected to result in an increase in CO_2e emissions relative to existing conditions. Factors that led to this rise in CO_2e emissions include a roughly 153,000-square-foot expansion of total building area over the three campuses and the increase in vehicle trips to the Cañada College and Skyline College campuses due to the new Building 1, Kinesiology/Wellness, and residential complex, respectively.

Note that energy-related emissions under Project conditions are anticipated to decrease slightly, mainly due to the contribution of renewable energy installations and a 15% exceedance of Title 24 2013 Energy Efficiency Standards. These measures outweigh the increase in emissions from an increase in total square footage of buildings on campus, including the new residential complex, relative to existing conditions. Thus, GHG emissions associated with Project operation are below the efficiency threshold of 1,100 MT CO_2e/year (**Table 3.6-17**). The Project is therefore expected to result in a less than significant contribution to this cumulative impact. No mitigation is required.

Table 3.6-17. San Mateo County Community College District Total Unmitigated Operational Emissions (metric tons per year)

Campus	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_20	CO_2e
Cañada	25.4	696.2	721.7	1.6	<0.1	755.4
San Mateo	6.5	-806.0	-799.5	0.3	<0.1	-793.8
Skyline	38.0	161.8	199.8	2.2	<0.1	248.1
Total	**70.0**	**52.0**	**122.0**	**4.1**	**<0.1**	**209.7**
BAAQMD Threshold	--	--	--	--	--	*1,100*
BAAQMD Threshold Exceeded?						*No*

Bio-CO_2 = biological sources of carbon dioxide
NBio-CO_2 = non-biological sources of carbon dioxide
CO_2 = carbon dioxide
CH_4 = methane
N_2O = nitrous oxide
CO_2e = carbon dioxide equivalent

3.7 Hazards and Hazardous Materials

This section describes the regulatory and environmental setting for hazards and hazardous materials. It also describes impacts on hazards and hazardous materials that would result from implementation of the Project and mitigation for significant impacts, where feasible and appropriate.

A *hazardous material* is any substance that, because of its quantity, concentration, or physical or chemical properties, may pose a hazard to human health and the environment. Under Title 22 of the California Code of Regulations (CCR), the term *hazardous substance* refers to both hazardous materials and hazardous wastes. Both of these are classified according to four properties: (1) toxicity, (2) ignitability, (3) corrosiveness, and (4) reactivity (CCR Title 22, Chapter 11, and Article 3). A hazardous material is defined in CCR, Title 22 as:

> [a] substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed (CCR, Title 22, Section 66260.10).

Hazardous materials in various forms can cause death, serious injury, long-lasting health effects, and damage to buildings, homes, and other property. Hazards to human health and the environment can occur during production, storage, transportation, use, or disposal of hazardous materials.

3.7.1 Regulatory Setting

The following regulations are relevant to hazards and hazardous materials and apply to implementation of the Project on all three campuses, unless otherwise specified.

3.7.1.1 Federal

Federal Toxic Substances Control Act/Resource Conservation and Recovery Act/Hazardous and Solid Waste Act

The federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976 (RCRA) established a U.S. Environmental Protection Agency (EPA)-administered program to regulate the generation, transport, treatment, storage, and disposal of hazardous waste. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the cradle to grave system of regulating hazardous wastes.

Comprehensive Environmental Response, Compensation, and Liability Act/ Superfund Amendments and Reauthorization Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as "Superfund," was enacted by Congress on December 11, 1980. This law (42 United States Code [USC] 103) provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA

establishes requirements concerning closed and abandoned hazardous waste sites, provides for liability of persons responsible for releases of hazardous waste at these sites, and establishes a trust fund to provide for cleanup when no responsible party can be identified. CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP (Title 40, Code of Federal Regulations [CFR], Part 300) provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Acton October 17, 1986.

Occupational Safety and Health Administration

The Occupational Safety and Health Administration's (OSHA) mission is to ensure the safety and health of American workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health. The OSHA staff establishes and enforces protective standards and reaches out to employers and employees through technical assistance and consultation programs. OSHA standards are listed in 29 CFR 1910.

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) came into law on October 11, 1976. TSCA authorized EPA to secure information on all new and existing chemical substances, as well as to control any of the substances that were determined to cause unreasonable risk to public health or the environment. The current polychlorinated biphenyls (PCB) regulations, CFR at 40 CFR 761, were published pursuant to the TCSA, and include the following list of CFR Sections that are applicable to the Project.

- Section 761.60 Disposal requirements.
- Section 761.61 PCB remediation waste cleanup and disposal options.
- Section 761.77 Coordination with the EPA Regional Administrator.
- Section 761.79 Decontamination standards and procedures.
- Section 761.97 Export requirements for disposal.
- Section 761.125 Requirements for PCB spill cleanup.
- Section 761.130 Sampling requirements.
- Section 761.180 Records and monitoring.

Department of Transportation Hazardous Materials Regulations (49 CFR 100–185)

U.S. Department of Transportation (DOT) Hazardous Materials regulations cover all aspects of hazardous materials packaging, handling, and transportation. Parts 107 (Hazard Materials Program), 130 (Oil Spill Prevention and Response), 172 (Emergency Response), 173 (Packaging Requirements), 174 (Rail Transportation), 176 (Vessel Transportation), 177 (Highway Transportation), 178 (Packaging Specifications), and 180 (Packaging Maintenance) would all apply to the Project and/or surrounding uses.

Enforcement of these DOT regulations is shared by each of the following administrations under delegations from the Secretary of the DOT.

- Research and Special Programs Administration is responsible for container manufacturers, reconditioners, and retesters and shares authority over shippers of hazardous materials.
- Federal Highway Administration enforces all regulations pertaining to motor carriers.
- Federal Railroad Administration enforces all regulations pertaining to rail carriers.
- Federal Aviation Administration (FAA) enforces all regulations pertaining to air carriers.
- Coast Guard enforces all regulations pertaining to shipments by water.

Federal Aviation Administration

FAA regulates aviation at regional, public, private, and military airports, such as Moffett Federal Airfield. The FAA regulates objects affecting navigable airspace and structures taller than 200 feet according to Federal Aviation Regulation 49 CFR 77.13.

3.7.1.2 State

California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) was created in 1991. It unified California's environmental authority in a single cabinet-level agency and brought the California Air Resource Board (ARB), State Water Resources Control Board (State Water Board), Regional Water Quality Control Boards (Regional Water Boards), the California Department of Resources Recycling and Recovery (CalRecycle), the Department of Toxic Substance Control (DTSC), the Office of Environmental Health Hazard Assessment, and the Department of Pesticide Regulation under one agency. These agencies were placed within the CalEPA umbrella for the protection of human health and the environment to ensure the coordinated deployment of state resources. Their mission is to restore, protect, and enhance the environment and ensure public health, environmental quality, and economic vitality.

Department of Toxic Substance Control

DTSC, a department of CalEPA, is the primary agency in California for regulating hazardous waste, cleaning up existing contamination, and finding ways to reduce the amount of hazardous waste produced in California. DTSC regulates hazardous waste primarily under the authority of the federal RCRA and the California Health and Safety Code (primarily Division 20, Chapters 6.5–10.6, and Title 22, Division 4.5). Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

USC 65962.5 (commonly referred to as the Cortese List) includes DTSC-listed hazardous waste facilities and sites, Department of Health Services lists of contaminated drinking water wells, sites listed by the State Water Board as having underground storage tank (UST) leaks or a discharge of hazardous wastes or materials into the water or groundwater, and lists from local regulatory agencies of sites with a known migration of hazardous waste/material.

Hazardous Waste Control Act

DTSC is responsible for the enforcement of the Hazardous Waste Control Act (California Health and Safety Code Section 25100 et seq.), which creates the framework under which hazardous wastes are managed in California. The law provides for the development of a state hazardous waste program that administers and implements the provisions of the federal RCRA cradle-to-grave waste management system in California. It also provides for the designation of California-only hazardous waste and development of standards that are equal to or, in some cases, more stringent than federal requirements.

Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses that use hazardous materials to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs. Hazardous materials are defined as unsafe raw or unused materials that are part of a process or manufacturing step. They are not considered hazardous waste. Health concerns pertaining to the release of hazardous materials, however, are similar to those pertaining to hazardous waste.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) (California Health and Safety Code, Chapter 6.11, Sections 25404–25404.9) consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of the environmental and emergency response programs and provides authority to the Certified Unified Program Agency (CUPA).

The hazardous materials programs in the Unified Program are: Hazardous Materials Business Plan (HMBP) Program, California Accidental Release Prevention (CalARP) Program, Underground Storage Tank (UST) Program, Aboveground Storage Tank (AST) Program, Hazardous Waste Generator Program, and Hazardous Waste Tiered-Permitting Program.

California Code of Regulations, Title 8—Industrial Relations

Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal OSHA) and the federal OSHA are the agencies responsible for assuring worker safety in the workplace. Cal OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices. These standards would be applicable to both construction and operation of the Project.

California Labor Code (Division 5; Parts 1 and 7.5)

The California Labor Code is a collection of regulations that include regulation of the workplace to ensure appropriate training on the use and handling of hazardous materials and the operation of equipment and machines that use, store, transport, or dispose of hazardous materials. Division 5, Part 1, Chapter 2.5 ensures that employees who are in charge of handling hazardous materials are appropriately trained and informed about the materials they are handling. Division 5, Part 7 ensures that employees who work with volatile flammable liquids are outfitted with appropriate safety gear and clothing.

California Department of Forestry and Fire Protection Fire Hazard Safety Zones

In accordance with PRC Sections 4201–4204 and Government Code Section 51175–51189, the California Department of Forestry and Fire Protection (CALFIRE) has mapped areas of significant wildland fire hazards based on fuels, weather, topography, and other factors. These fire hazard severity zones (FHSZs) represent relative risks associated with wildland fires.

State regulations as specified in PRC 4290–4291 and Title 14 require that specific vegetation management requirements be adhered to within very high severity hazard risk zones in order to reduce property damage and loss of life within these areas.

3.7.1.3 Regional

Association of Bay Area Governments Local Hazard Mitigation Plan

The Association of Bay Area Governments (ABAG) tracks evolving hazards and develops strategies to minimize risk exposure in Bay Area communities. The goal of the ABAG Local Hazard Mitigation Plan is to "maintain and enhance a disaster-resistant region by reducing the potential for loss of life, property damage, and environmental degradation from natural disaster, while accelerating economic recovery from those disasters" (Association of Bay Area Governments 2015).

San Mateo County

The following mitigation strategies from the *Annex to 2010 Association of Bay Area Governments Local Hazard Mitigation Plan Taming Natural Disasters: San Mateo County* are relevant to hazards and hazardous materials (County of San Mateo 2012).

Progress from 2005 Plan

- The County adopted a new set of building regulations that incorporate the most recent version of the California Building Code. These include regulations that address a large number of the strategies for fire hazards which were identified as priorities in the 2005 Annex. County Fire has also made improvements to its firefighting equipment.

On-Going Mitigation Strategy Programs

- Reliable water for fire suppression.
- Defensible space and vegetation programs to reduce fire risks.
- Development requirements for high fire hazard areas.
- Maintenance of the Emergency Operations Center in a fully functional state of readiness.
- Coordination of emergency planning and services with police, fire, and providers of water, food, energy, transportation, financial, information, and public health services.
- Participation in multi-agency efforts to mitigate fire threat.
- Application of CEQA and state mandated requirements to ensure adequate mitigation. Activities for hazards and to minimize air pollution.

Town of Woodside

The following mitigation strategies from the *Annex to 2010 Association of Bay Area Governments Local Hazard Mitigation Plan Taming Natural Disasters: Town of Woodside* are relevant to hazards and hazardous materials (Town of Woodside 2011).

On-Going Mitigation Strategy Programs

- Participation in general mutual-aid agreements and agreements with adjoining jurisdictions for cooperative response to fires, floods, earthquakes, and other disasters.

City of San Mateo

The following mitigation strategies from the *2010 Local Hazard Mitigation Plan – Annex City of San Mateo Taming Natural Disasters* are relevant to hazards and hazardous materials (City of San Mateo and Association of Bay Area Governments 2010).

Progress from 2005 Plan

- Adopted new 2010 California Building and Fire Codes on November 1, 2010. Enforcement began on January 1, 2011.
- Construction of Fire Station #23—Completed construction November 2011.
- Programming and design for the replacement of Fire Station #24—Began June 2011.

Future Mitigation Actions and Priorities

- Replace Fire Station #25.
- Remodel or replace Fire Station #27.

City of San Bruno

The following mitigation strategies from the *City of San Bruno's 2012 Local Hazard Mitigation Plan Annex* are relevant to hazards and hazardous materials (City of San Bruno Fire Department 2012).

Progress from 2005 Plan

- Adopted new Building and Fire Codes. On January 25, 2011 the San Bruno City Council adopted the latest edition of the 2010 California Building and Fire Codes with local amendments. The city began enforcing these codes on January 1, 2011.
- In 2010, the Fire Department requested and received from the gas utility more detailed information on transmission line location, pipe size, and pressure of the lines. Also, additional training and public education requests have been made to the utility provider.

On-Going Mitigation Strategy Programs

- Encourage regulatory agencies to work collaboratively with safety professionals to develop creative mitigation strategies that effectively balance environmental and safety needs, particularly to meet critical wildfire, flood, and earthquake safety levels.

3.7.1.4 Local

As stated in Section 2.6 of Chapter 2, *Project Description*, the District is exempt from the application of city and county zoning ordinances, except the proposed residential complex at Skyline College because it is a non-educational use. However, the current zoning and applicable general plan provisions for each campus are provided for informational purposes.

County of San Mateo Certified Unified Agency Program

EPA grants enforcement authority over federal hazardous materials regulations to the states. In California, the state agency with responsibility is CalEPA. CalEPA has granted authority to the local agency San Mateo County Health Department, Environmental Health Division (SMCEHD) for

implementation and enforcement of many hazardous materials regulations in the county under the Certified Uniform Program Agency (CUPA) Program. CUPA certifies 83 local government agencies to implement the hazardous waste and materials standards set by five state agencies. (California Environmental Protection Agency 2015.)

Hazardous Material Business Plan

Businesses must complete a Hazardous Material Business Plan (HMBP) within 30 days of handling or storing a hazardous material equal to or greater than minimum reportable quantities: 55 gallons for liquids, 500 pounds for solids, and 200 cubic feet at standard temperature and pressure for compressed gasses. The purpose of the HMBP is to provide information to firefighters, health officials, planners, public safety officers, health care providers and others in case of emergency in order to "lessen damage to the health and safety of people and the environment when a hazardous material is released" (County of San Mateo 2015a).

The HMBP must include the following elements (County of San Mateo 2015a).

- Summary of business activities.
- Owner/operator information including emergency contacts.
- The type and quantity of reportable hazardous materials.
- Site map.
- Emergency response procedures.
- Employee training program.

The District has an HMBP on record with San Mateo County Department of Environmental Health for Cañada College, College of San Mateo (CSM), and Skyline College.

California Accidental Release Prevention Program

The California Accidental Release Prevention Program (CalARP) protects people from the release of regulated substances into the environment. *Regulated substances* are chemicals that pose a major threat to public health and safety or the environment because they are highly toxic, flammable, or explosive. Examples of regulated substances are chlorine gas, nitric acid, and propane. There is a federal list and a state list; each contains a list of types and threshold quantities of regulated substances. All businesses that store or handle more than a threshold quantity of a regulated substance must develop a Risk Management Plan (RMP) to handle an accidental release. (County of San Mateo 2015b.)

The RMP must include procedures for the following activities (County of San Mateo 2015b).

- Keeping employees and customers safe.
- Handling regulated substances.
- Training staff.
- Maintaining equipment.
- Checking that substances are stored safely.
- Responding to an accidental release.

Underground Storage Tank Program

To make sure that USTs remain leak-free and do not contaminate soil and groundwater, tank owners must comply with the following requirements (County of San Mateo 2015c).

- Possess a valid operating permit.
- Conduct routine testing.
- Maintain equipment.
- Prepare an approved leak-response plan.
- Upgrade tank systems, as required.

Aboveground Storage Tank Program

CUPA has responsibility for the implementation, inspection, enforcement, and administration of aboveground storage tank operations. Aboveground storage tanks are defined as those with capacity to store 55 gallons or more of petroleum and that are substantially or totally above the surface of the ground. (County of San Mateo 2015d.)

Hazardous Waste Generation and Disposal

San Mateo County operates a Hazardous Waste Disposal and Reduction program with three waste streams: residential, businesses that generate small quantities of hazardous waste (Very Small Quantity Generator Program), and businesses that generate larger quantities.

City of Redwood City General Plan

The Redwood City Public Safety Element (City of Redwood City 2010) includes the following policies relevant to the Project.

Policy PS-8.3. Work to ensure that land previously used as agriculture, commercial, and industrial is safe and contains no environmental hazards.

Policy PS-8.4. Encourage the use of green building practices to reduce potentially hazardous materials in construction materials.

Town of Woodside General Plan

The Woodside General Plan (Town of Woodside 2012) includes the following policies relevant to the Project.

Policy NH 1.9. Require Assessment And Mitigation Of Fire Hazards.

The Town shall seek to minimize the risk associated with fire hazards by requiring adequate defensible space, fire resistant materials, adequate fire protection, and the appropriate siting of structures.

1. Clearance around Structures

   Adequate clearance and vegetation control around structures (defensible space) shall be maintained by the property owner to prevent the spread of fire by direct exposure, and to assure adequate access for fire suppression.

2. Fire Safe Design and Materials

   New buildings that are located in a designated Very High Fire Hazard Severity Zone shall be designed and constructed to comply with the special requirements that are provided in the California Building Code, including vegetation management for the property, which shall be performed in accordance with the California Fire Code. New buildings that are not located in a designated Very- High Fire Hazard Severity Zone, shall be designed and constructed to comply with the Town's special fire safety construction requirements that are established in the Town's Municipal Code.

3. Remodeled buildings

   Remodeled buildings town-wide shall be designed and constructed to comply with the Town's special fire safety construction requirements that are provided in the Town's Municipal Code.

4. Protective Measures

   In areas designated by the Town of Woodside as a Very High Fire Severity Hazard Zone (Map NH4), as well as within other areas that are identified as presenting a high fire hazard, special protective measures shall be provided for vegetation management in order to control the spread of a wildfire in accordance with the California Fire Code.

5. Water Supply

   Where water supply in existing subdivided areas does not meet current standards for fire flow, all reasonable measures for improvement shall be pursued.

6. Protecting Structures

   Owners of habitable buildings and critical facilities in areas classified as Very High Fire Hazard Severity, should take reasonable measures to minimize their risk by providing defensible space, fire resistant materials, adequate fire protection, and appropriate siting of new structures.

7. Planning Commission Review

   Prior to the approval of any lot line adjustment or division of lands classified as Very High Fire Severity Hazard, the Planning Commission shall review the proposed means of providing adequate fire protection.

Policy NH2.1. Preserve the Functioning Of Critical Facilities

The primary response of the Town is to ensure that critical facilities will continue to function in the event of fire, natural, or other disasters.

1. Critical Facilities

   Critical facilities, such as major transportation links, communications and utility lines, and emergency shelter facilities, should be located, designed and operated in a manner which maximizes their ability to remain functional after a disaster.

2. Hazard Sensitive Utilities

   New roads, bridges and utility lines (either public or private) that cross active or potentially active fault traces should be designed and constructed with recognition of the hazard of fault movement. Such designs shall consider the possibility of up to about a 20 foot right-lateral displacement on the active (1906) trace of the San Andreas Fault Zone.

3. Utility Line Examination

   All existing utility lines that cross active or potentially active fault traces shall be examined to determine their ability to survive fault movement. Utility companies should institute orderly programs of installing shut-off devices on these lines, starting with the lines that

cross the active (1906) trace and those which serve the most people. Adequate emergency water supplies should be established and maintained in areas served by water lines which cross active fault traces.

4. Roadways

   Roads shall be improved as feasible to have adequate width and clearance to function in times of emergencies.

5. Evacuation Routes

   Interstate 280, Woodside Road, and the arterial roads shown in the Circulation Element of this General Plan are established as "evacuation routes" for use in the event of emergency. Evacuation routes under Town jurisdiction shall be maintained in usable conditions at all times. Emergency evacuation routes should not be impeded by structures, low overhead signs, or trees that would block the passage of vehicles.

City of San Mateo General Plan

The San Mateo General Plan Safety Element (City of San Mateo 2010) includes the following policies relevant to the Project.

S 5.3. On-site Waste Treatment. Promote on-site treatment of hazardous wastes by waste generators to minimize the use of hazardous materials and the transfer of waste for off site treatment.

S 5.4. Transportation Routes. Restrict the transportation of hazardous materials and waste to truck routes designated in Circulation Policy C-1.3, and limit such transportation to non-commute hours.

S 5.6. Siting of Hazardous Waste Management Facilities. Restrict the possible location of new hazardous waste management facilities to those areas designated on Figure S-5.

S 5.9. Shared Data. Maintain the sharing of County data on businesses which store hazardous substances with local emergency service providers, such as the Police and Fire departments, as well as the Public Works Department for the wastewater source control program.

City of San Bruno General Plan

The San Bruno General Plan Health and Safety Element (City of San Bruno 2009a) and Land Use and Urban Design Element (City of San Bruno 2009b) include the following policies relevant to the Project.

HS-23. Ensure appropriate clean-up of all former commercial and industrial sites according to relevant regulatory standards prior to reuse.

HS-24. Control the transport of hazardous substances to minimize potential hazards to the local population. Identify appropriate regional and local routes for transportation of hazardous materials, and require that fire and emergency personnel can easily access these routes for response to spill incidents.

H-26. Restrict siting of businesses that use, store, process, or dispose of large quantities of hazardous materials in areas subject to seismic fault rupture or strong ground shaking (Figure 7-2).

H-28. Require that lead-based paint and asbestos surveys be conducted by qualified personnel prior to structural demolition or renovation, in buildings constructed prior to 1980.

HS-29. Require abatement of lead-based paint and asbestos prior to structural renovation and demolition, and compliance with all State, federal, OSHA, Bay Area Air Quality Management District, and San Mateo County Health, Environmental Health Division rules and regulations.

HS-30. Regulate development on sites with known or suspected contamination of soil and/or groundwater to ensure that construction workers, the public, future occupants, and the environment are adequately protected from hazards associated with contamination, in accordance with federal, State, and local rules, regulations, policies, and guidelines.

HS-31. Require that developers compact infill soil following the removal of underground storage tanks.

LUD-64. Require industrial uses to meet air and water quality standards, to properly store and dispose of hazardous substances, and to avoid adverse impacts on the environment.

San Mateo County Community College District 2014 Emergency Operations Plan

The District has developed the 2014 Emergency Operations Plan to govern its responses to a broad range of emergency and hazardous situations. These include hazardous materials incidents and fire. Each campus has its own Emergency Operations Plan. The sections relating to hazardous materials incidents and fire are identical to the Districtwide Emergency Operations Plan.

3.7.2 Environmental Setting

3.7.2.1 Cañada College

Hazardous Materials

According to the EnviroStor database of the California DTSC, which tracks hazardous waste cleanup sites and hazardous waste facilities, no hazardous waste storage sites, hazardous waste sites, or clean-up sites are located within 0.25 mile of the Cañada College campus (**Figure 3.7-1a**) (California Department of Toxic Substances Control 2015). According to EnviroMapper (U.S. Environmental Protection Agency 2015), which lists generators appearing on hazardous waste manifests, and includes on- and offsite hazardous waste disposal activities or other releases, as reported through the EPA's Toxic Release Inventory, Cañada College is a small generator of hazardous materials. According to GeoTracker (State Water Resources Control Board 2015), which includes a list of sites that are contaminated as a result of a leaking UST, one case for a leaking UST cleanup site is on the Cañada College campus. Remediation of the site is completed, and the case is closed (State Water Resources Control Board 2015).

In accordance with the applicable codes and regulations, waste and non-waste hazardous materials are stored onsite in appropriate primary and secondary containment. Because Cañada College stores regulated quantities of certain hazardous materials onsite, it is subject to the requirements of California Health and Safety Code (CHSC) Section 25504, and CCR Sections 2729–2732, which require submittal of an HMBP as discussed in Section 3.7.1.3. The District currently maintains a HMBP for Cañada College, which includes an inventory of hazardous materials stored onsite, a disclosure of risks associated with hazardous materials exposure, a site map, an emergency response plan, a spill prevention plan, a closure plan, an employee training program, and a list of emergency contacts.

As noted in Chapter 2, *Project Description*, buildings planned for demolition as part of Project activities are likely to contain asbestos and lead-based paint because of their age. Additionally, electrical transformers and fluorescent lights can be sources of polychlorinated biphenyls (PCBs).

Earth materials at the Cañada College campus include serpentinite, which has the potential to include a naturally occurring form of asbestos (Advance Soil Technology 2014a, 2014b).

Historic land uses at the campus include agricultural use as an olive orchard; therefore, historical use of pesticide is likely and pesticides may have accumulated in the soil (Cañada College n.d.a).

Schools

Cañada College provides community college services. Cañada Middle College High School, which enrolls approximately 30 students, is a nontraditional high school collaboration between Cañada College and the Sequoia Union High School District that is located on the Cañada College campus (Cañada College n.d.b). In addition, both public and private 4-year universities offer several baccalaureate degrees.

Airports and Private Air Strips

No airports or private air strips are located within 2 miles of Cañada College. The nearest airport facility, San Carlos Municipal Airport, is approximately 4.5 miles to the northeast.

Emergency Response Plans and Evacuation Plans

Most of the campus is under the jurisdiction of the Woodside Fire Protection District (Woodside Fire Protection District 2015).

Only a small portion of Cañada College is situated within the city limits of Redwood City, including the existing faculty housing and parking lots.

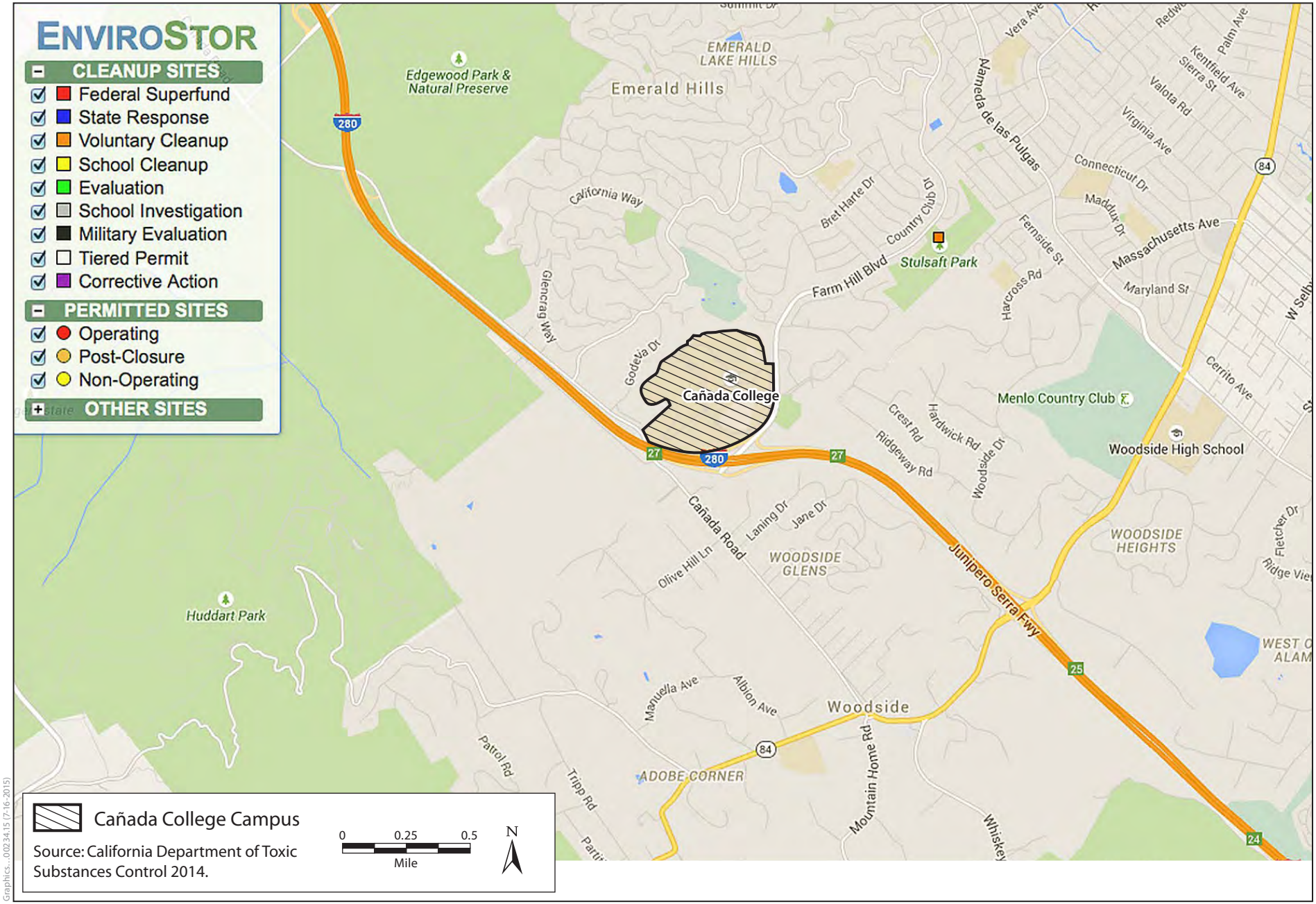
Wildland Fire

Cañada College is surrounded by hillsides, which presents some potential for wildland fires. Although the construction site is adjacent to grassy slopes to the east and south, it is within the developed part of campus. The construction site at the Cañada College campus lies in a *high* FHSZ in the local responsibility area zoned by CALFIRE (CALFIRE 2008) (**Figure 3.7-2**). The Woodside Fire Protection District provides fire response to the campus.

3.7.2.2 College of San Mateo

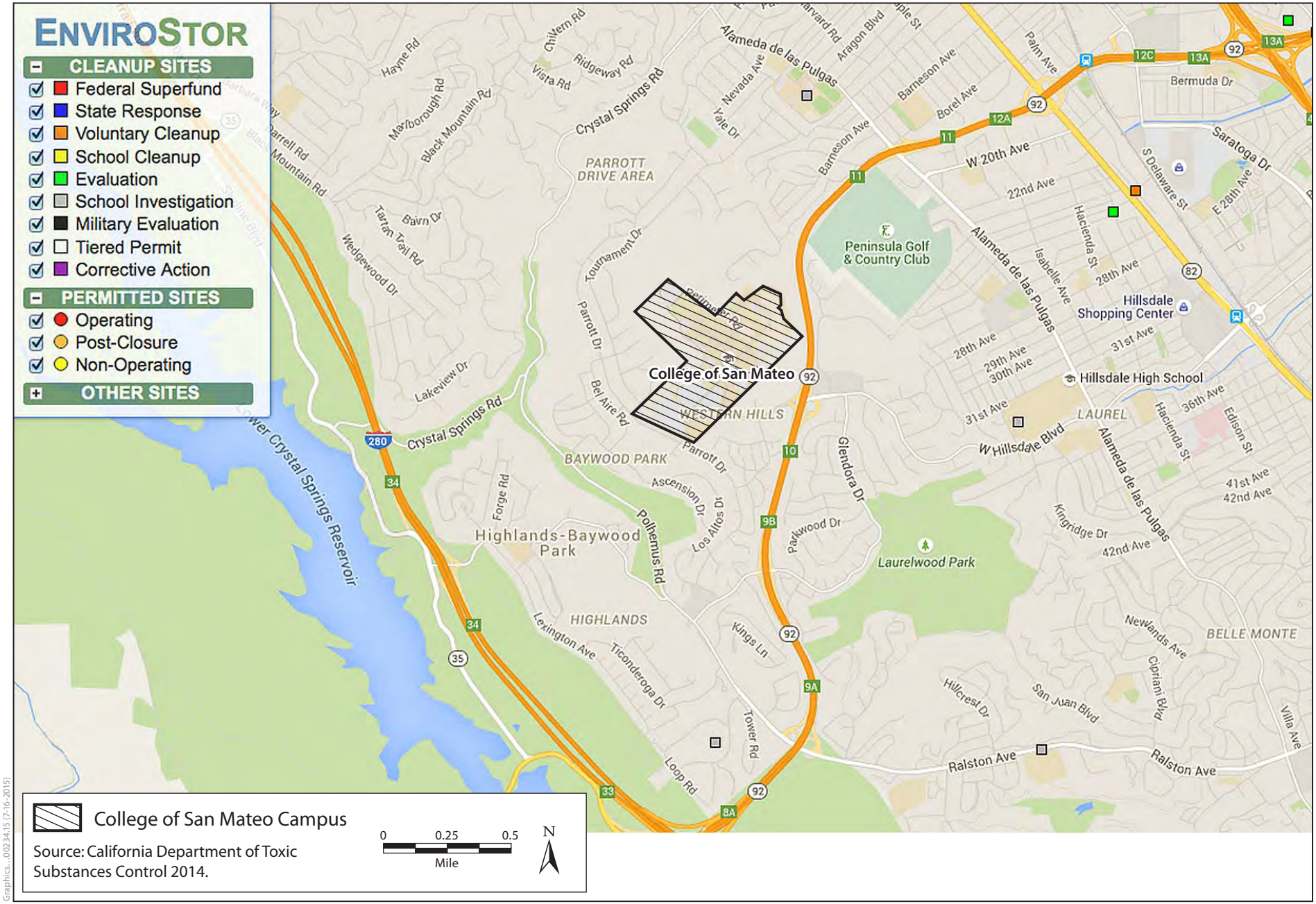
Hazardous Materials

According to the EnviroStor database, no hazardous storage sites, hazardous waste sites, or clean-up sites are located within 0.25 mile of the CSM campus (**Figure 3.7-1b**) (California Department of Toxic Substances Control 2015). According to EnviroMapper (U.S. Environmental Protection Agency 2015), CSM is a small generator of hazardous materials. According to GeoTracker (State Water Resources Control Board 2015), one case for a leaking UST cleanup site is on the CSM campus. Remediation of the site is completed and the case is closed (State Water Resources Control Board 2015).



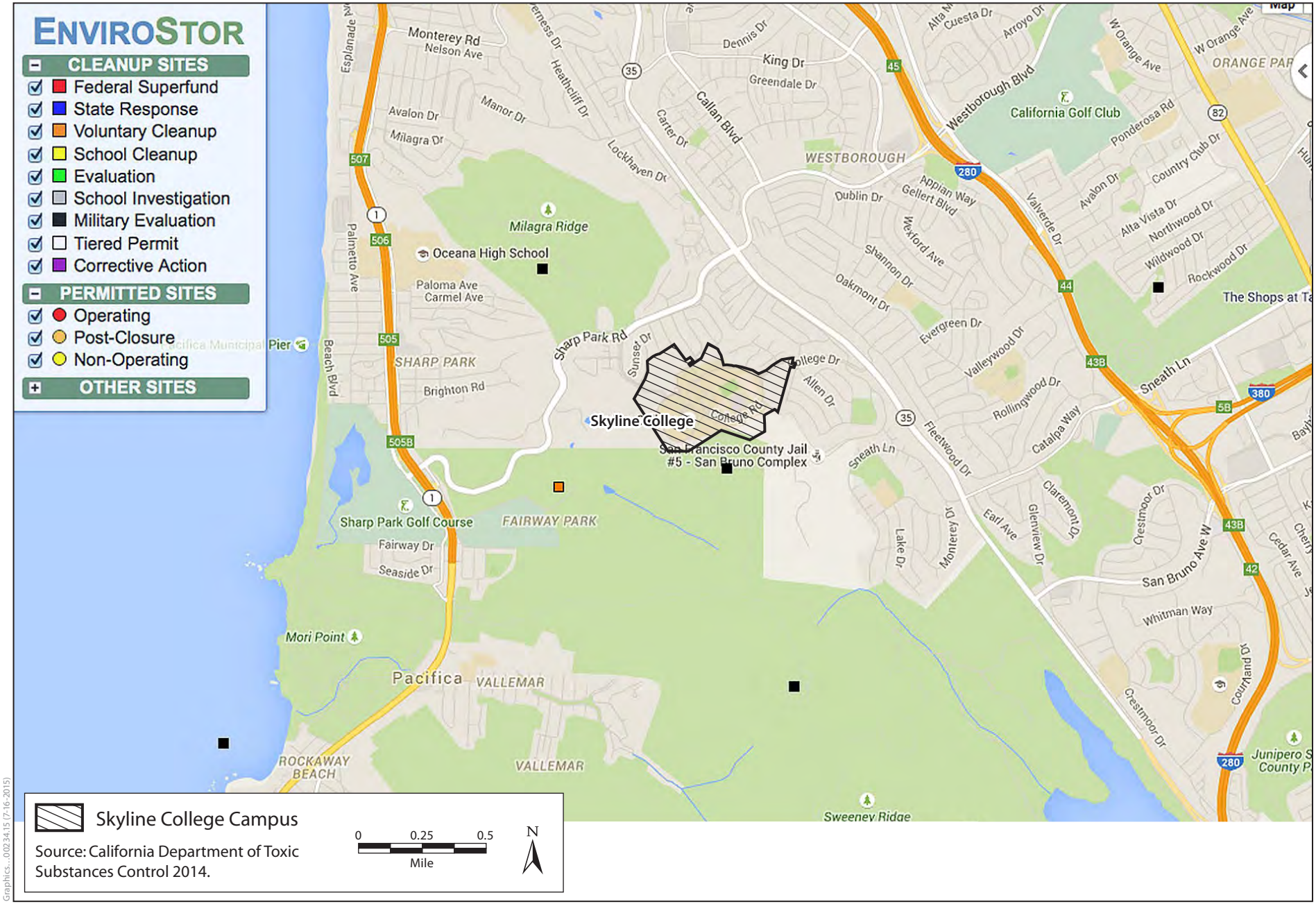
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Figure 3.7-1a
Hazardous Materials and Hazardous Waste Sites near Cañada College



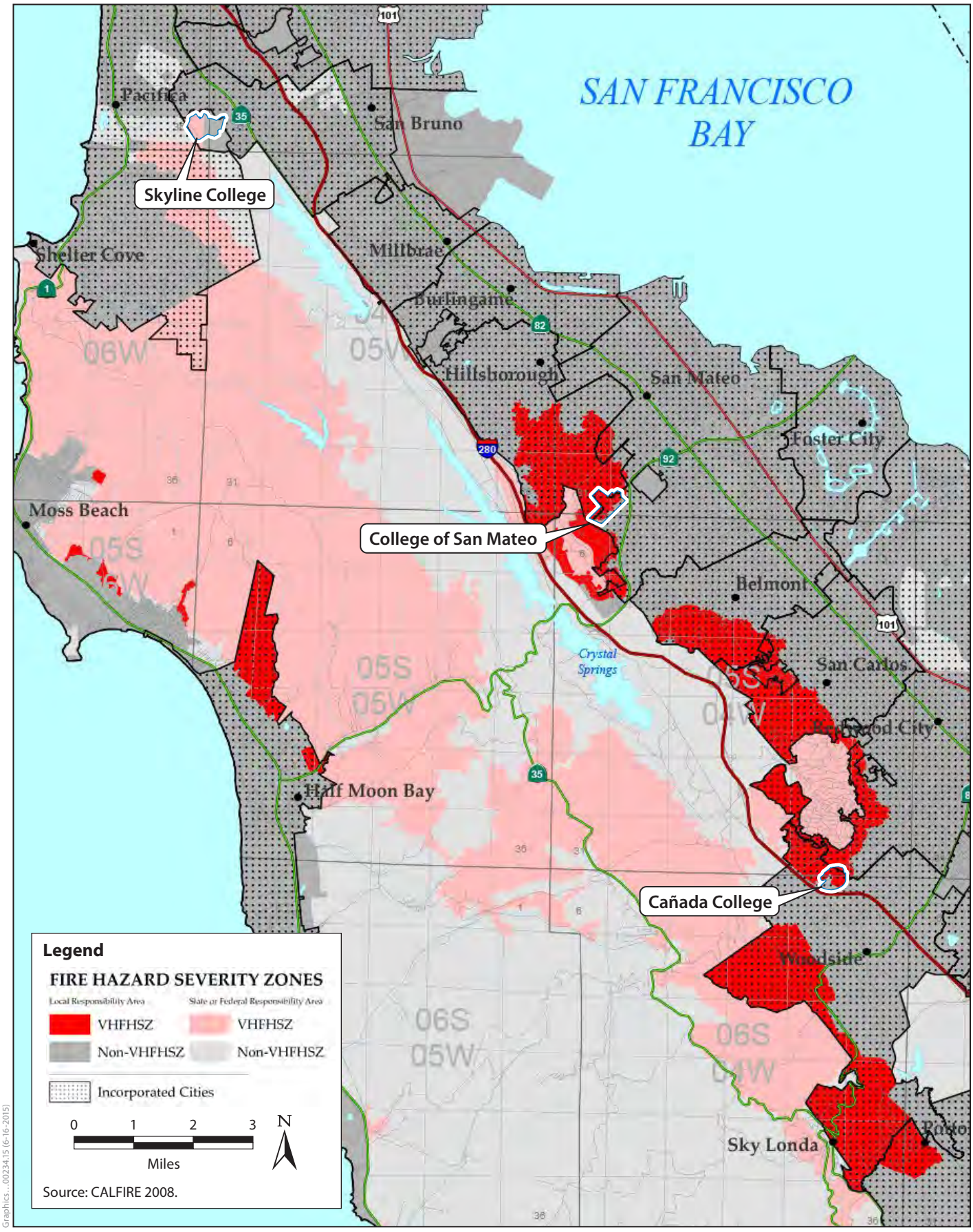
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Figure 3.7-1b
Hazardous Materials and Hazardous Waste Sites near College of San Mateo



Graphics...0023415 (7-16-2015)

Figure 3.7-1c
Hazardous Materials and Hazardous Waste Sites near Skyline College



Graphics...0023415 (6-16-2015)

Figure 3.7-2
CALFIRE Fire Hazard Severity Zones in Local Responsibility Area, San Mateo County

In accordance with the applicable codes and regulations, waste and non-waste hazardous materials are stored onsite in appropriate primary and secondary containment. Because CSM stores regulated quantities of certain hazardous materials onsite, it is subject to the requirements of CHSC Section 25504, and CCR Sections 2729–2732, which require submittal of an HMBP as discussed in Section 3.7.1.3, *Local*. The District currently maintains a HMBP for CSM.

As noted in Chapter 2, *Project Description*, buildings planned for demolition as part of Project activities are likely to contain asbestos and lead-based paint.

Earth materials at the CSM campus include serpentinite, which has the potential to include a naturally occurring form of asbestos (Brabb et al. 2000).

Schools

CSM provides community college services. Additionally, Middle College High School, which enrolls approximately 70 students, is an alternative education program in the San Mateo Union High School District that is located on the CSM campus (College of San Mateo n.d.).

CSM houses the Mary Meta Lazarus Child Development Center, which provides early care and education for children from 2.5 to 5 years old for the CSM community (College of San Mateo n.d.).

Airports and Private Air Strips

No airports or private air strips are located within 2 miles of CSM. The nearest airport facility, San Carlos Municipal Airport, is approximately 4.9 miles to the southeast.

Emergency Response Plans and Evacuation Plans

The City of San Mateo Fire Department is responsible for emergency response planning and evacuation planning (Leong pers. comm.).

Wildland Fire

CSM lies on a plateau in a deeply wooded area. The slopes leading to the plateau are wooded. The construction sites at the CSM campus lies in *very high* and *high* FHSZs in the local responsibility area zoned by CALFIRE (CALFIRE 2008) (**Figure 3.7-2**). The City of San Mateo Fire Department provides fire response to the campus.

3.7.2.3 Skyline College

Hazardous Materials

According to the EnviroStor database, one military evaluation site is located within 0.25 mile of the Skyline College campus (**Figure 3.7-1c**) (California Department of Toxic Substances Control 2015). The military evaluation site is a former U.S. Coast Guard airfield operations site. As of July 1, 2014, the Department of Defense recommends no further action at this site. The DTSC and the State Water Board provisionally have accepted this ruling and "reserve the right to address any appropriate environmental or human health related issue, should additional information concerning the environmental condition of this site become available in the future" (California Department of Toxic Substances Control 2015). According to EnviroMapper (U.S. Environmental Protection Agency

2015), Skyline College is a small generator of hazardous materials. According to GeoTracker (State Water Resources Control Board 2015), one case for a leaking UST cleanup site is on Skyline College campus. Remediation is completed and the case is closed (State Water Resources Control Board 2015).

In accordance with the applicable codes and regulations, waste and non-waste hazardous materials are stored onsite in appropriate primary and secondary containment. Because Skyline College stores regulated quantities of certain hazardous materials onsite, it is subject to the requirements of CHSC Section 25504, and CCR Sections 2729–2732, which require submittal of an HMBP as discussed in Section 3.7.1.3. The District currently maintains a HMBP for Skyline College.

As noted in Chapter 2, *Project Description*, buildings planned for demolition as part of Project activities are likely to contain asbestos and lead-based paint.

Unlike at Cañada College and CSM, earth materials at the Skyline College campus do not include serpentinite (Advance Soil Technology, Inc. 2015c).

Schools

Skyline College provides community college services. Middle College at Skyline College is affiliated with the Jefferson Unified High School District, South San Francisco Unified School District, and San Mateo Unified High School District and is located on the Skyline College campus. Middle College, which will serve 100 students at full enrollment, began service in fall 2015 with 50 11th grade students. In year 2, the first 50 students will be promoted to 12th grade and 50 new students will be admitted to 11th grade (Skyline College n.d.).

Skyline College houses Building 14, Early Childhood Education (Loma Chica), which provides child care and education for children from 2 years old to kindergarten, serving the Skyline College and local community (Skyline College n.d.).

Airports and Private Air Strips

No airports or private air strips are located within 2 miles of Skyline College. The nearest airport facility, San Francisco International Airport, is approximately 4.5 miles to the east.

Emergency Response Plans and Evacuation Plans

The San Bruno Fire Department is responsible for emergency response planning and evacuation planning (Allan pers. comm.).

Wildland Fire

Skyline College lies on a saddle, at the top of a steep vegetated slope, with vegetated slopes rising above it. The site of Building 12, Environmental Studies, is adjacent to a vegetated slope to the west and south. The other construction sites are within the developed part of the campus. Portions of the Skyline College campus lie in *high* and *moderate* FHSZs in the local responsibility area as zoned by CALFIRE. The proposed site for Building 12, Environmental Sciences, is in a *high* FHSZ (CALFIRE 2008) (**Figure 3.7-2**). The San Bruno Fire Department provides fire service to the campus.

3.7.3 Impacts Analysis

3.7.3.1 Methodology

To prepare the impact analysis, the following sources were consulted.

- EnviroStor database of the California DTSC for hazardous materials waste sites and clean-up sites (California Department of Toxic Substances Control 2014, 2015).
- CALFIRE wildland fire hazard zone maps (CALFIRE 2008).
- San Mateo County Unified Program requirements (CalEPA 2015; County of San Mateo 2015a, 2015b, 2015c).
- School district maps (Redwood City School District 2015; San Bruno School District 2013; San Mateo-Foster City School District 2015).
- U.S. Geological Survey geologic mapping (Brabb et al. 2000).
- Project-specific geotechnical reports (Advance Soil Technology, Inc. 2014a, 2014b).

3.7.3.2 Significance Criteria

The State CEQA Guidelines Appendix G (14 CCR 15000 et seq.) has identified significance criteria to be considered for determining whether a project could have significant impacts on existing hazards and hazardous materials.

An impact would be considered significant if construction or operation of the Project would have any of the following consequences.

- 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.
- Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.
- Be located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area.
- Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Because none of the campuses lie within 2 miles of an airport or private air strip, the two airport safety criteria are not discussed further.

3.7.3.3 Impacts and Mitigation Measures

Cañada College

Impact CC-HAZ-1: Cause a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during Project construction or from Project operation (less than significant with mitigation)

Construction

Project construction would not include substances listed in 40 CFR 355 Appendix A: *Extremely Hazardous Substances and Their Threshold Planning Quantities*. However, Project construction would involve routine transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and caulking. Such transport, use, and disposal must comply with applicable regulations such as the RCRA, DOT Hazardous Materials Regulations, and the local CUPA regulations. Although small amounts of solvents, paints, oils, grease, and caulking would be transported, used, and disposed of during Project construction, these materials are typically used in construction projects, are not considered acutely hazardous and, thus, would not represent the transport, use, and disposal of acutely hazardous materials. Because the Project would not include 40 CFR 355 Appendix A-listed substances, and because compliance with existing regulations is mandatory, the Project is not expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Further, as stated in Chapter 2, *Project Description*, the District has committed to Environmental Commitment EC-HAZ-1, which is restated below as **Mitigation Measure CC-HAZ-1**. This measure would minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities and would be completed before any construction or demolition activities begin. With implementation of **Mitigation Measure CC-HAZ-1** and through compliance with existing regulations, the hazard to the public or the environment through the routine transport, use, or disposal of hazardous waste during construction of the Project would be less than significant.

Mitigation Measure CC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Cañada College

The contractors will develop and implement a spill prevention, control, and countermeasure program (SPCCP) to minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities. The SPCCP will be completed before any construction or demolition activities begin. Implementation of this measure will comply with state and federal water quality regulations.

The District will review and approve the SPCCP before onset of construction activities. The District will routinely inspect the construction area to verify that the measures specified in the SPCCP are properly implemented and maintained. The District will notify its contractors immediately if there is a noncompliance issue and will require compliance.

The federal reportable spill quantity for petroleum products, as defined in 40 CFR 110, is any oil spill that includes any of the following.

- Violates applicable water quality standards.
- Causes a film or sheen on or discoloration of the water surface or adjoining shoreline.
- Causes a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.

If a spill is reportable, the contractors' superintendents will notify the District, and the District will take action to contact the appropriate safety and clean-up crews to ensure that the SPCCP is followed. A written description of reportable releases must be submitted to the San Francisco Bay Regional Water Quality Control Board. This submittal must contain a description of the spill, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred, and a description of the steps taken to prevent and control future releases. The releases would be documented on a spill report form.

If a reportable spill has occurred and results determine that Project activities have adversely affected surface water or groundwater quality, a detailed analysis will be performed by a registered environmental assessor to identify the likely cause of contamination. This analysis will conform to American Society for Testing and Materials (ASTM) standards, and will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, the District and its contractors will select and implement measures to control contamination, with a performance standard that groundwater quality must be returned to baseline conditions. These measures will be subject to approval by the District.

Operation

It is anticipated that the Project would use hazardous materials typical of educational and office use (solvents, cleaning agents, science lab materials, paints, petroleum fuels, propane, batteries, etc.) that would be used in small, localized amounts. In the quantities used, these materials are generally non-toxic. The Project would not require additional hazardous materials use and would not result in a net increase in amounts of common types of hazardous materials or normal routine use of these products. Therefore, it would not create a significant hazard to residents in the vicinity of the Project. Further, the District will manage all hazardous materials in accordance with its HMBP on record with the San Mateo County of Environmental Health.

Therefore, Project operation would not result in a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous waste during operation of the Project. This impact would be less than significant. No mitigation is required.

Impact CC-HAZ-2: Cause 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 during Project construction (less than significant with mitigation)

Excavation activities could release hazardous materials present in the soil. Pesticides from prior agricultural land use as an orchard and naturally occurring asbestos in serpentinite could be present in the soil. Construction activities related to the Project may encounter these contaminants during grading, excavation, and installation of support structures for the new development. However, as described in Chapter 2, *Project Description*, the District has committed to Environmental

Commitment EC-HAZ-2, which is restated below as **Mitigation Measure CC-HAZ-2**. This plan would ensure that all contaminants are contained and managed safely. With implementation of **Mitigation Measure CC-HAZ-2**, this impact would be less than significant.

As described in Chapter 2, the Project involves demolition of Building 1, Gymnasium. Construction debris that is not recycled onsite would be removed along The Loop Road to Cañada Road or Farm Hill Road. Demolition of existing structures could result in the release of asbestos-containing materials, lead-based paint or other hazardous materials. However, as described in Chapter 2, the District has committed to Environmental Commitment EC-HAZ-3, which is restated as **Mitigation Measure CC-HAZ-3**. This measure would ensure that all building materials containing lead-based paint or asbestos-containing materials are identified and removed safely and in accordance with established standards. With implementation of **Mitigation Measure CC-HAZ-3**, this impact would be less than significant.

Mitigation Measure CC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Cañada College

The construction specifications will include this measure to protect construction workers and/or the public from known or previously undiscovered soil and groundwater contamination during construction activities. Prior to excavation, a Site Safety Plan (soil and groundwater management plan) will be prepared and, at a minimum, include the following.

- A requirement that all construction activities involving work in proximity to potentially contaminated soils and/or groundwater be undertaken in accordance with California Occupational Safety and Health Administration (Cal OSHA) standards, contained in Title 8 of the CCR.
- Soil and groundwater mitigation and control specifications for construction activities, including health and safety provisions for monitoring exposure to construction workers, procedures to be undertaken in the event that previously unreported contamination is discovered, and emergency procedures and responsible personnel.
- Procedures for managing soils and groundwater removed from the site to ensure that any excavated soils and/or dewatered groundwater with contaminants are stored, managed, and disposed in accordance with applicable regulations.

Mitigation Measure CC-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at Cañada College

To protect construction workers and the public from known or undiscovered hazardous building materials, including asbestos and lead, all demolition activities will be undertaken in accordance with the California Occupational Safety and Health Administration (Cal OSHA) standards contained in Title 8 of the California Code of Regulations (CCR). During demolition activities, all building materials containing lead-based paint will be removed in accordance with Cal OSHA Lead in Construction Standard, Title 8, CCR 1532.1. All potentially friable asbestos-containing materials (ACMs) will be removed in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to building demolition or renovation that may disturb the materials. Applicable standards include the following.

- The facility will be inspected before any renovation occurs in which 160 square feet or more of building materials or 260 linear feet or more of pipe insulation will be disturbed at a regulated facility, or any demolition occurs at a regulated facility.
- An asbestos notification form will be submitted to the Bay Area Air Quality Management District for any regulated asbestos abatement Project or regulated demolition 10 working days before the activity begins.
- If ACMs are discovered during a renovation or demolition, they must be removed before the Project may proceed. Also, the Cal OSHA and California Environmental Protection Agency hazardous waste regulations apply in most cases.

Impact CC-HAZ-3: Cause 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 during Project operation (less than significant)

Once the Project is constructed and in use, operation of the buildings could result in occupants using hazardous materials typical of office and educational use (solvents, cleaning agents, science lab materials, paints, petroleum fuels, batteries, etc.). These hazardous material products are generally already used in small amounts, and the Project would not increase net use. Any spills that might occur would be limited in scope and spill area. Further, District standards require that hazardous materials generated through District use be managed according to the HMBP on record with the San Mateo County Department of Environmental Health. This impact would be less than significant. No mitigation is required.

Impact CC-HAZ-4: Emit or involve handling of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (less than significant with mitigation)

Construction

As stated in 3.7.2.1, *Environmental Setting*, with the exception of Cañada Middle College High School, no child care or elementary through high school level school is located within 0.25 mile of the Cañada College campus. However, Cañada College provides community college uses. Construction of the Project would involve hazardous materials typical of a construction project (as discussed under Impact CC-HAZ-1). Students, faculty, and other persons present on the campus could be exposed to hazardous emissions or other hazardous materials releases during Project construction. However, any potential construction-related hazardous releases or emissions would be from commonly used materials such as fossil fuels, solvents, and paints and would not include substances listed in 40 CFR 355 Appendix A: *Extremely Hazardous Substances and Their Threshold Planning Quantities*. Any such spills would be localized.

Further, with implementation of **Mitigation Measures CC-HAZ-1**, **CC-HAZ-2**, and **CC-HAZ-3**, which would ensure that any releases or emissions would be immediately contained and cleaned, the impact on school and housing facilities on campus would be less than significant.

Mitigation Measure CC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Cañada College

This measure is described under Impact CC-HAZ-1.

Mitigation Measure CC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Cañada College

This measure is described under Impact CC-HAZ-2.

Mitigation Measure CC-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at Cañada College

This measure is described under Impact CC-HAZ-2.

Operation

Once the Project is constructed and in use, operation of the buildings could result in occupants using hazardous materials typical of office and educational use (solvents, cleaning agents, paints, petroleum fuels, batteries, etc.). These hazardous material products are generally used in small amounts, and any spills that may occur would be limited in scope and spill area. Further, District standards require that hazardous materials generated through District use be disposed of and managed according to the HMBP on record with the San Mateo County Department of Environmental Health.

The impact of Project operation on school and housing facilities on campus would be less than significant. No mitigation is required.

Impact CC-HAZ-5: Be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment (less than significant)

No hazardous materials waste disposal sites, clean-up sites, or contamination sites are located at or near the campus. The impact would be less than significant. No mitigation is required.

Impact CC-HAZ-6: Interfere with adopted emergency response plan or emergency evacuation plan (less than significant with mitigation)

Most of the Cañada College campus lies within the Woodside town limits. The proposed improvements would not have an effect on the Town of Woodside's existing emergency response plan and evacuation plan. Further, the District has committed to Environmental Commitment EC-TRA-1, which is restated below as **Mitigation Measure CC-TRA-1** and would ensure that the construction contractor would notify and consult with emergency service providers regarding construction, and provide emergency access by whatever means necessary to expedite and facilitate the passage of emergency vehicles.

Only a small portion of Cañada College lies within Redwood City's limits. The proposed improvements would not have an effect on Redwood City's existing emergency response plan or evacuation plan (Palisi pers. comm.).

With implementation of **Mitigation Measure CC-TRA-1**, this impact would be less than significant.

Mitigation Measure CC-TRA-1: Implement a Traffic Control Plan during construction at Cañada College

This measure is described under Impact CC-TRA-4 in Section 3.14, *Transportation and Traffic*.

Impact CC-HAZ-7: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires (less than significant with mitigation)

Cañada College is surrounded by hillsides, which presents some potential for wildland fires. Building 1, Kinesiology/Wellness, is adjacent to grassy slopes to the east and south but is within the developed part of campus. Portions of the campus are within a designated *very high* FHSZ that may contain substantial wildland fire risks and hazards, as determined by CALFIRE (CALFIRE 2008). The proposed improvements would take place in the developed portion of campus. However, in dry weather, particularly if there are high winds, a grass fire started inadvertently at a construction site could quickly spread to adjoining wildland areas.

With implementation of **Mitigation Measure CC-HAZ-4**, the impact would be less than significant.

Mitigation Measure CC-HAZ-4: Comply with legal requirements for fire prevention during construction activities at Cañada College

In accordance with the Public Resources Code (PRC), the construction contractor will comply with the following legal requirements during construction activities.

- Earthmoving and portable equipment with internal combustion engines will be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (PRC Section 4442).
- Appropriate fire suppression equipment will be maintained during the highest fire danger period: from April 1 to December 1 (PRC Section 4428).
- On days when a burning permit is required, flammable materials will be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor will maintain the appropriate fire suppression equipment (PRC Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines will not be used within 25 feet of any flammable materials (PRC Section 4431).

College of San Mateo

Impact CSM-HAZ-1: Cause a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during Project construction or from Project operation (less than significant with mitigation)

Construction

Project construction would not include substances listed in 40 CFR 355 Appendix A: *Extremely Hazardous Substances and Their Threshold Planning Quantities*. However, Project construction would involve routine transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and caulking and would not include substances listed in 40 CFR 355 Appendix A: *Extremely Hazardous Substances and Their Threshold Planning Quantities*. Such transport, use, and disposal must comply with applicable regulations such as the RCRA, DOT Hazardous Materials Regulations, and the local CUPA regulations. Although small amounts of solvents, paints, oils, grease, and caulking would be transported, used, and disposed of during Project construction, these materials are typically used in construction projects and are not considered acutely hazardous and, thus, would not represent the transport, use, and disposal of acutely hazardous materials. Because compliance

with existing regulations is mandatory, the Project is not expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Further, as stated in Chapter 2, *Project Description*, the District has committed to Environmental Commitment EC-HAZ-1, which is restated as **Mitigation Measure CSM-HAZ-1**. This measure will minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities and will be completed before any construction or demolition activities begin. With implementation of **Mitigation Measure CSM-HAZ-1**, and through compliance with existing regulations, the hazard to the public or the environment through the routine transport, use, or disposal of hazardous waste during construction of the Project would be less than significant.

Mitigation Measure CSM-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at the College of San Mateo

This measure is the same as Mitigation Measure CC-HAZ-1 described under Impact CC-HAZ-1, but would be implemented at the College of San Mateo.

Operation

It is anticipated that the Project would use hazardous materials typical of educational and office use (solvents, cleaning agents, science lab materials, paints, petroleum fuels, propane, batteries, etc.) that would be used in small, localized amounts. In the quantities used, these materials are generally non-toxic. The Project would not require additional hazardous materials use and would not result in a net increase in amounts of common types of hazardous materials or normal routine use of these products. Therefore, it would not create a significant hazard to residents in the vicinity of the Project. Further, the District will manage all hazardous materials in accordance with its HMBP on record with the San Mateo County of Environmental Health.

Therefore, Project operation would not result in a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous waste during operation of the Project. This impact would be less than significant. No mitigation is required.

Impact CSM-HAZ-2: Cause 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 during Project construction (less than significant with mitigation)

Excavation activities could release hazardous materials present in the soil, primarily naturally occurring asbestos in serpentinite could be present in the soil. Construction activities related to the Project may encounter this during grading, excavation, and installation of support structures for the new development. However, as described in Chapter 2, *Project Description*, the District has committed to Environmental Commitment EC-HAZ-2, which is restated as **Mitigation Measure CSM-HAZ-2**. This plan would ensure that all contaminants are contained and managed safely. With implementation of **Mitigation Measure CSM-HAZ-2**, this impact would be less than significant.

As described in Chapter 2, the Project involves demolition of Buildings 8, 12, and 19. Construction debris not recycled onsite would be removed along College Drive to Hillsdale Boulevard. Demolition of existing structures could result in the release of asbestos-containing materials, lead-based paint or other hazards. However, as described in Chapter 2, the District has committed to Environmental

Commitment EC-HAZ-3, which is restated as **Mitigation Measure CSM-HAZ-3**. This measure would ensure that all building materials containing lead-based paint or asbestos-containing materials are identified and removed safely and in accordance with established standards. With implementation of **Mitigation Measure CSM-HAZ-3**, this impact would be less than significant.

Mitigation Measure CSM-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at the College of San Mateo

This measure is the same as Mitigation Measure CC-HAZ-2 described under Impact CC-HAZ-2, but would be implemented at the College at San Mateo.

Mitigation Measure CSM-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at the College of San Mateo

This mitigation is the same as Mitigation Measure CC-HAZ-3 described under Impact CC-HAZ-2, but would be implemented at the College at San Mateo.

Impact CSM-HAZ-3: Cause 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 during Project operation (less than significant)

Once the Project is constructed and in use, operation of the buildings could result in occupants using hazardous materials typical of office and educational use (solvents, cleaning agents, paints, petroleum fuels, batteries, etc.). These hazardous material products are currently used in small amounts, and any spills that may occur would be limited in scope and spill area. The Project would not result in a net increase in use. Further, District standards require that hazardous materials generated through District use be managed according to the HMBP on record with the San Mateo County Department of Environmental Health. This impact would be less than significant. No mitigation is required.

Impact CSM-HAZ-4: Emit or involve handling of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (less than significant with mitigation)

Construction

As stated in 3.7.2., *Environmental Setting*, CSM houses a child care facility. Further, the CSM campus provides community college uses. Construction of the Project would involve hazardous materials typical of a construction project (as discussed under Impact CSM-HAZ-1). Students, faculty, and other persons present on the campus could be exposed to hazardous emissions or other hazardous materials releases during Project construction. However, any potential construction-related hazardous releases or emissions would be from commonly used materials such as fossil fuels, solvents, and paints and would not include substances listed in 40 CFR 355 Appendix A: *Extremely Hazardous Substances and Their Threshold Planning Quantities*. Any such spills would be localized.

Further, with **Mitigation Measures CSM-HAZ-1**, **CSM-HAZ-2**, and **CSM-HAZ-3**, which would ensure that any releases or emissions would be immediately contained and cleaned, the impact on school and housing facilities on campus would be less than significant.

Mitigation Measure CSM-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at the College of San Mateo

This measure is the same as Mitigation Measure CC-HAZ-1 described under Impact CC-HAZ-1, but would be implemented at the College of San Mateo.

Mitigation Measure CSM-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at the College of San Mateo

This measure is the same as Mitigation Measure CC-HAZ-2 described under Impact CC-HAZ-2, but would be implemented at the College of San Mateo.

Mitigation Measure CSM-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at the College of San Mateo

This measure is the same as Mitigation Measure CC-HAZ-3 described under Impact CC-HAZ-2, but would be implemented at the College of San Mateo.

Operation

As described above, once the Project is constructed and in use, hazardous materials typical of office and educational use would be subject to the District's standards according to the HMBP on record with the San Mateo County Department of Environmental Health.

The impact of Project operation on school and housing facilities on campus would be less than significant. No mitigation is required.

Impact CSM-HAZ-5: Be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment (less than significant)

No hazardous materials waste disposal sites, clean-up sites, or contamination sites are located at or near the campus. The impact would be less than significant. No mitigation is required.

Impact CSM-HAZ-6: Interfere with adopted emergency response plan or emergency evacuation plan (less than significant with mitigation)

The proposed improvements would not have an effect on the City of San Mateo's existing emergency response plan and evacuation plan (Leong pers. comm.). Further, the District has committed to Environmental Commitment EC-TRA-1, which is restated as **Mitigation Measure CSM-TRA-1** and would ensure that the construction contractor would notify and consult with emergency service providers regarding construction, and provide emergency access by whatever means necessary to expedite and facilitate the passage of emergency vehicles. With implementation of **Mitigation Measure CSM-TRA-1**, this impact would be less than significant.

Mitigation Measure CSM-TRA-1: Implement a Traffic Control Plan during construction at the College of San Mateo

This measure is described under Impact CSM-TRA-4 in Section 3.14, *Transportation and Traffic*.

Impact CSM-HAZ-7: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires (less than significant with mitigation)

As stated in 3.7.2., *Environmental Setting*, CSM lies on a plateau in a deeply wooded area. The slopes leading to the plateau are wooded. The CSM campus adjoins a *very high* FHSZ in the local responsibility area mapped by CALFIRE (CALFIRE 2008). The proposed improvements would take place in the developed portion of campus. However, in dry weather, a grass fire started inadvertently at a construction site could quickly spread to the wooded slopes, or a wildland fire started on a slope below the campus could quickly spread up the slopes to the campus. Increased fire risks are caused by human activities, such as smoking and equipment operation. Heated mufflers could set surrounding vegetation on fire. Construction-related activities such as steel-cutting and welding are potential sources of ignition.

With implementation of **Mitigation Measures CSM-HAZ-4** and **CSM-HAZ-5**, the impact would be less than significant.

Mitigation Measure CSM-HAZ-4: Comply with legal requirements for fire prevention during construction activities at the College of San Mateo

This measure is the same as Mitigation Measure CC-HAZ-4 described under Impact CC-HAZ-7, but would be implemented at the College of San Mateo.

Mitigation Measure CSM-HAZ-5: Create and maintain adequate firebreaks and practice fire prevention at the College of San Mateo

The District will comply with the following measures for the duration of Project operations.

- Maintain around and adjacent to buildings and structures a firebreak made by removing and clearing away, for a distance of 100 feet as required by PRC 4290, all flammable vegetation or other combustible growth.
- Maintain around and adjacent to the project facilities additional fire protection or firebreak made by removing all brush, flammable vegetation, or combustible growth that is located within 100 feet of the structures or to the property line, whichever is nearer. Grass and other vegetation located more than 30 feet from the structures and less than 18 inches in height above the ground may be maintained where necessary to stabilize the soil and prevent erosion.
- Provide prior to project operations and maintain at all times a screen over the outlet of every chimney or stack that is attached to any device that burns any solid or liquid fuel. The screen will be constructed of nonflammable material with openings not larger than 0.5 inch.
- Prior to occupancy, install fire extinguishers.
- Employees will be trained in using extinguishers and communicating with the San Mateo Fire Department.
- The San Mateo Fire Department and/or CALFIRE will periodically inspect the project area.
- Provide the San Mateo Fire Department and/or CALFIRE access to onsite water storage tanks, if such access is needed.

Skyline College

Impact SC-HAZ-1: Cause a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during Project construction or from Project operation (less than significant with mitigation)

Construction

As stated in 3.7.2., *Environmental Setting*, Skyline College houses a child care facility. Further, the Skyline College campus provides community college uses. Construction of the Project would involve hazardous materials typical of a construction project. Students, faculty, and other persons present on the campus could be exposed to hazardous emissions or other hazardous materials releases during Project construction. However, any potential construction-related hazardous releases or emissions would not include substances listed in 40 CFR 355 Appendix A: *Extremely Hazardous Substances and Their Threshold Planning Quantities*. Such transport, use, and disposal must comply with applicable regulations such as the RCRA, DOT Hazardous Materials Regulations, and the local CUPA regulations. Although small amounts of solvents, paints, oils, grease, and caulking would be transported, used, and disposed of during Project construction, these materials are typically used in construction projects and are not considered acutely hazardous and, thus, would not represent the transport, use, and disposal of acutely hazardous materials. Because compliance with existing regulations is mandatory, the Project is not expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Further, as stated in Chapter 2, *Project Description*, the District has committed to Environmental Commitment EC-HAZ-1, which is restated as **Mitigation Measure SC-HAZ-1**. This measure will minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities and will be completed before any construction or demolition activities begin. With implementation of **Mitigation Measure SC-HAZ-1** and through compliance with existing regulations, the hazard to the public or the environment through the routine transport, use, or disposal of hazardous waste during construction of the Project would be less than significant.

> **Mitigation Measure SC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Skyline College**
>
> This measure is the same as Mitigation Measure CC-HAZ-1 described under Impact CC-HAZ-1, but would be implemented at Skyline College.

Operation

It is anticipated that the Project would use hazardous materials typical of educational and office use (solvents, cleaning agents, science lab materials, paints, petroleum fuels, propane, batteries, etc.) that would be used in small, localized amounts. In the quantities used, these materials are generally non-toxic. The Project would not require additional hazardous materials use and would not result in a net increase in amounts of common types of hazardous materials or normal routine use of these products. Therefore, it would not create a significant hazard to residents in the vicinity of the Project. Further, the District will manage all hazardous materials in accordance with its HMBP on record with the San Mateo County of Environmental Health. Therefore, Project operation would not result in a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous waste during operation of the Project. This impact would be less than significant. No mitigation is required.

Impact SC-HAZ-2: Cause 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 during Project construction (less than significant with mitigation)

Excavation activities could release hazardous materials present in the soil. Construction activities related to the Project may encounter contaminants during grading, excavation, and installation of support structures for the new development. However, as described in Chapter 2, *Project Description*, the District has committed to Environmental Commitment EC-HAZ-2, which is restated as **Mitigation Measure SC-HAZ-2**. This plan would ensure that all contaminants are contained and managed safely. With implementation of **Mitigation Measure SC-HAZ-2**, this impact would be less than significant.

As described in Chapter 2, the Project involves demolition of Building 1, Social Science/Creative Arts (approximately 78,000 square feet) and Buildings 19 and 20 (approximately 39,000 square feet). Construction debris not recycled onsite would be removed along College Road to Sharp Park Road or along College Drive to Skyline Boulevard. Demolition of existing structures could result in the release of asbestos-containing materials, lead-based paint or other hazards. However, as described in Chapter 2, the District has committed to Environmental Commitment EC-HAZ-3, which is restated as **Mitigation Measure SC-HAZ-3**. With implementation of **Mitigation Measure SC-HAZ-3**, which would ensure that all building materials containing lead-based paint or asbestos-containing materials are identified and removed safely and in accordance with established standards, this impact would be less than significant.

Mitigation Measure SC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Skyline College

This measure is the same as Mitigation Measure CC-HAZ-2 described under Impact CC-HAZ-2, but would be implemented at Skyline College.

Mitigation Measure SC-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at Skyline College

This measure is the same as Mitigation Measure CC-HAZ-3 described under Impact CC-HAZ-2, but would be implemented at Skyline College.

Impact SC-HAZ-3: Cause 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 during Project operation (less than significant)

Once the Project is constructed and in use, operation of the buildings could result in occupants using hazardous materials typical of office and educational use (solvents, cleaning agents, science lab materials, paints, petroleum fuels, batteries, etc.). These hazardous material products are currently used in small amounts, and any spills that may occur would be limited in scope and spill area. The Project would not increase net use. Further, District standards require that hazardous materials generated through District use be managed according to the HMBP on record with the San Mateo County Department of Environmental Health. The required inspection/permit is complete and the permit has been issued. The District is currently working with the County on final approval of the business plan. This impact would be less than significant. No mitigation is required.

Impact SC-HAZ-4: Emit or involve handling of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (less than significant with mitigation)

Construction

Construction of the Project would involve hazardous materials typical of a construction project (as discussed under Impact SC-HAZ-1). However, any potential construction-related hazardous releases or emissions would be from commonly used materials such as fossil fuels, solvents, and paints and would not include substances listed in 40 CFR 355 Appendix A: *Extremely Hazardous Substances and Their Threshold Planning Quantities*. Any spills would be localized.

With implementation of **Mitigation Measures SC-HAZ-1**, **SC-HAZ-2**, and **SC-HAZ-3**, which would ensure that any releases or emissions would be immediately contained and cleaned, the impact on school facilities on campus would be less than significant.

Mitigation Measure SC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Skyline College

This measure is the same as Mitigation Measure CC-HAZ-1 described under Impact CC-HAZ-1, but would be implemented at Skyline College.

Mitigation Measure SC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Skyline College

This measure is the same as Mitigation Measure CC-HAZ-2 described under Impact CC-HAZ-2, but would be implemented at Skyline College.

Mitigation Measure SC-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at Skyline College

This measure is the same as Mitigation Measure CC-HAZ-3 described under Impact CC-HAZ-2, but would be implemented at Skyline College.

Operation

Once the Project is constructed and in use, operation of the buildings could result in occupants using hazardous materials typical of office and educational use (solvents, cleaning agents, science lab materials, paints, petroleum fuels, batteries, etc.). These hazardous material products are currently used in small amounts, and any spills that may occur would be limited in scope and spill area. The Project would not increase net use. Further, District standards require that hazardous materials generated through District use be managed according to the HMBP on record with the San Mateo County Department of Environmental Health.

The impact of Project operation on school facilities on campus would be less than significant. No mitigation is required.

Impact SC-HAZ-5: Be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment (less than significant)

No hazardous materials waste disposal sites, clean-up sites, or contamination sites are located at or near the campus. The impact would be less than significant. No mitigation is required.

Impact SC-HAZ-6: Interfere with adopted emergency response plan or emergency evacuation plan (less than significant with mitigation)

The proposed improvements would not have an effect on the City of San Bruno's existing emergency response plan and evacuation plan (Allan pers. comm.). Further, the District has committed to Environmental Commitment EC-TRA-1, which is restated as **Mitigation Measure SC-TRA-1** and would ensure that the construction contractor would notify and consult with emergency service providers regarding construction, and provide emergency access by whatever means necessary to expedite and facilitate the passage of emergency vehicles. With implementation of **Mitigation Measure SC-TRA-1**, this impact would be less than significant.

Mitigation Measure SC-TRA-1: Implement a Traffic Control Plan during construction at Skyline College

This measure is described under Impact SC-TRA-4 in Section 3.14, *Transportation and Traffic*.

Impact SC-HAZ-7: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires (less than significant with mitigation)

Skyline College lies on a saddle, at the top of a steep vegetated slope, with vegetated slopes rising above it. The site of Building 12, Environmental Studies, is adjacent to a vegetated slope to the west and south that is within a *very high* FHSZ as mapped by CALFIRE (CALFIRE 2008). Although the campus itself is outside the fire hazard zone, in dry windy weather, a grass fire started inadvertently at a construction site could quickly spread to adjoining wildland fire hazard areas. Increased fire risks are caused by human activities such as smoking and equipment operation. Heated mufflers could set surrounding vegetation on fire. Construction-related activities such as steel-cutting and welding are potential sources of ignition.

With implementation of **Mitigation Measures SC-HAZ-4** and **SC-HAZ-5**, the impact would be less than significant.

Mitigation Measure SC-HAZ-4: Comply with legal requirements for fire prevention during construction activities at Skyline College

This measure is the same as Mitigation Measure CC-HAZ-4 described under Impact CC-HAZ-7, but would be implemented at Skyline College.

Mitigation Measure SC-HAZ-5: Create and maintain adequate firebreaks and practice fire prevention at Skyline College

This measure is the same as Mitigation Measure CSM-HAZ-5 described under Impact CSM-HAZ-7, but would be implemented at Skyline College.

3.7.3.4 Cumulative Impacts

Hazardous materials issues are generally site-specific. They relate to specific geologic conditions, prior history of land uses, and current activities on the site or adjacent sites. Except in cases where there is a major hazardous site nearby (e.g., a Superfund Site) or the contamination reaches groundwater, hazardous materials impacts only affect conditions within a single site. Therefore, there is no cumulative impact from hazardous materials.

While there are no hazardous waste facilities in the immediate vicinity of any of the project sites, there are many hazardous waste facilities in the larger project vicinity. Any reasonably foreseeable projects could represent a cumulatively considerable contribution to this environment.

The Projects would involve use, storage, and exposure of hazardous materials. While generation of these materials would be ongoing, amounts would be limited, and materials would not include substances listed in 40 CFR 355 Appendix A: *Extremely Hazardous Substances and Their Threshold Planning Quantities*. Further, any hazardous material that is used, stored, or exposed during construction would be handled according to **Mitigation Measures CC-HAZ-1**, **CSM-HAZ-1**, and **SC-HAZ-1**; **Mitigation Measures CC-HAZ-2**, **CSM-HAZ-2**, and **SC-HAZ-2**; and **Mitigation Measures CC-HAZ-3**, **CSM-HAZ-3**, and **SC-HAZ-3**, as well as in accordance with all federal, state, and local regulations. In addition, any hazardous material that is used or generated during Project operation would be managed according to the relevant HMBP on record with the San Mateo County Health Department Environmental Health Division. Therefore, hazardous materials used, generated, or exposed during Project operation would not have the potential to contribute to hazards associated with cumulative projects.

Wildland fire and the related risks to human life and property are a cumulative impact in that FHSZs cover large areas of the state and risk is a function of the development that has and will occur near and within those zones. The CALFIRE maps FHSZs throughout the state, including San Mateo County. Of the District's three campuses, Cañada College is partially within and CSM and Skyline College adjoin *very high* FHSZs. Implementation of **Mitigation Measures CC-HAZ-4**, **CSM-HAZ-4**, **SC-HAZ-4**, **CSM-HAZ-5**, and **SC-HAZ-5** would avoid the potential for wildfires to be caused by construction. The new development on these campuses would not result in additional persons being exposed to risk of wildfire. Therefore, the Project would make a less than considerable cumulative contribution to cumulative wildland fire hazards.

3.8 Hydrology and Water Quality

This section describes the regulatory and environmental setting for hydrology and water quality. It also describes impacts on hydrology and water quality that would result from implementation of the Project and mitigation for significant impacts, where feasible and appropriate.

3.8.1 Regulatory Setting

The following federal, state, and local regulations are relevant to hydrology and water quality and apply to implementation of the Project on all three campuses unless otherwise specified.

The primary federal law regulating water quality is the federal Clean Water Act (CWA). The Environmental Protection Agency (EPA) has delegated to the State Water Resources Control Board (State Water Board) and its nine Regional Water Quality Control Boards (Regional Water Boards) the enforcement of the CWA in California. All Project activities need to be in compliance with, at a minimum, the CWA, the California Water Code's Porter-Cologne Water Quality Control Act (Porter-Cologne Act), and the *San Francisco Bay Basin (Region 2) Water Quality Control Plan* (Basin Plan) (San Francisco Bay Regional Water Quality Control Board 2011).

3.8.1.1 Federal

Clean Water Act

Several sections of the CWA pertain to regulating impacts on waters of the United States. The following CWA sections pertain to the Project. The term *waters of the United States* essentially refers to all surface waters, such as all navigable waters and their tributaries, all interstate waters and their tributaries, all wetlands adjacent to these waters, and all impoundments of these waters. EPA is the overarching authority protecting the quality of waters of the United States. However, the State Water Board regulates waters of the United States under CWA Sections 303, 401 and 402, and the United States Army Corps of Engineers (USACE) has jurisdiction over waters of the United States under CWA Section 404. This section describes Sections 303 and 402 because of potential effects on water quality. Sections 404 and 401 apply to wetlands and are not discussed further because there are no wetlands on any of the campuses.

Section 303—Impaired Waters

The State of California adopts water quality standards to protect beneficial uses of waters of the state as required by Section 303(d) of the CWA and the Porter-Cologne Act. Section 303(d) of the CWA established the total maximum daily load (TMDL) process to guide the application of state water quality standards (refer to the discussion of state water quality standards below). In order to identify candidate water bodies for TMDL analysis, a list of water quality–limited segments was generated by the State Water Board. These stream or river segments are impaired by the presence of pollutants such as sediment and are more sensitive to disturbance because of this impairment.

In addition to the impaired water body list required by CWA Section 303(d), CWA section 305(b) requires states to develop a report assessing statewide surface water quality. Both CWA requirements are being addressed through the development of a 303(d)/305(b) Integrated Report, which will

address both an update to the 303(d) list and a 305(b) assessment of statewide water quality. The State Water Board developed the statewide 2010 California Integrated Report based on the Integrated Reports from each of the nine Regional Water Boards. The 2010 California Integrated Report was approved by the State Water Board on August 4, 2010, and approved by EPA on November 12, 2010. The 2012 California Integrated Report with 303(d) listings was adopted by the State Board on April 8, 2015 (California State Water Resources Control Board: Resolution 2015-0021).

Section 402—National Pollutant Discharge Elimination System

The 1972 amendments to the federal Water Pollution Control Act established the National Pollutant Discharge Elimination System (NPDES) permit program to control discharges of pollutants from point-source discharges, or discharges that one can point to as a known source of pollutants. NPDES is the primary federal program that regulates point-source and nonpoint-source discharges to waters of the United States.

The 1987 amendments to the CWA created a new section of the CWA devoted to stormwater permitting (Section 402). EPA has granted the State of California primacy in administering and enforcing the provisions of the CWA and NPDES within state boundaries. NPDES permits are issued by one of the nine Regional Water Boards.

National Flood Insurance Program

In response to increasing costs of disaster relief, Congress passed the National Flood Insurance Act (NFIP) of 1968 and the Flood Disaster Protection Act of 1973. The Federal Emergency Management Agency (FEMA) administers the NFIP to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in floodplains. A Flood Insurance Rate Map (FIRM) is the official map of a community prepared by FEMA to delineate both the special flood hazard areas and the flood risk premium zones applicable to the community. Although surrounded by designated 100-year floodplains, the Project is located outside of the FEMA floodplains at an elevation that is not prone to flooding. The elevations of Cañada College, College of San Mateo (CSM), and Skyline College campuses are approximately 666, 662, and 660 feet above mean sea level (msl), respectively, which are much higher than the base flood elevations for the FEMA 100-year flood zones within the Project vicinity.

3.8.1.2 State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act was established and is implemented by the State Water Board and nine Regional Water Boards. The State Water Board is the primary state agency responsible for protecting the quality of the state's surface and groundwater supplies, or *waters of the state*. Waters of the state are defined more broadly than *waters of the United States* and defined as any surface water or groundwater, including saline waters, within the boundaries of the state. This includes waters in both natural and artificial channels. It also includes all surface waters that are not waters of the United States or non-jurisdictional wetlands, which are essentially distinguished by whether they are navigable. If waters are not navigable, then they are considered to be isolated and, therefore, only fall under the jurisdiction of the Porter-Cologne Act and not the CWA. The Regional Water Boards are responsible for implementing CWA Sections 303(d), 401, and 402 mentioned above and described in more detail below.

The Porter-Cologne Act authorizes the State Water Board to draft state policies regarding water quality. The act requires projects that are discharging, or proposing to discharge, wastes that could affect the quality of the state's water to file a Report of Waste Discharge (RWD) with the appropriate Regional Water Board. The Porter-Cologne Act also requires that State Water Board or a Regional Water Board adopt basin plans for the protection of water quality. Basin plans are updated and reviewed every 3 years and provide the technical basis for determining Waste Discharge Requirements (WDRs), taking enforcement actions, and evaluating clean water grant proposals. A basin plan must include (1) a statement of beneficial water uses that the Regional Water Board will protect, (2) water quality objectives needed to protect the designated beneficial water uses, and (3) strategies to be implemented with time schedules for achieving the water quality objectives (San Francisco Bay Regional Water Quality Control Board 2011).

The Project lies within the jurisdiction of the San Francisco Bay Water Board. The San Francisco Bay Water Board is responsible for the protection of beneficial uses of water resources into the San Francisco Bay from Tomales Bay south to Pescadero Creek, which includes Alameda, Contra Costa, San Francisco, Santa Clara (north of Morgan Hill), San Mateo, Marin, Sonoma, Napa, and Solano Counties. The Basin Plan was last updated in 2011 (San Francisco Bay Regional Water Quality Control Board 2011).

In basin plans, Regional Water Boards designate beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect these uses. Consequently, the water quality objectives developed for particular water segments are based on the designated use and vary depending on such use. The San Francisco Bay Water Board has region-wide and water body-specific beneficial uses and has set numeric and narrative water quality objectives for several substances and parameters in numerous surface waters in its region. For those waters that don't have specific beneficial uses or water quality objectives, the tributary rule[1] applies to streams. Specific objectives for concentrations of chemical constituents are applied to bodies of water based on their designated beneficial uses (San Francisco Bay Regional Water Quality Control Board 2011).

In addition, the State Water Board identifies waters failing to meet standards for specific pollutants, which are then state-listed in accordance with CWA Section 303(d). If it is determined that waters are impaired for one or more constituents and the standards cannot be met through point source or non-source point controls (NPDES permits or Waste Discharge Requirements), then CWA requires the establishment of TMDLs. TMDLs may establish daily load limits of the pollutant, or in some cases require other regulatory measures, with the ultimate goal of reducing the amount of the pollutant entering the water body to meet water quality objectives. The latest 303(d) impairments are listed in the 2010 Clean Water Act Section 303(d) and 305(b) Integrated Report (California State Water Resources Control Board 2011). More information on beneficial uses, water quality objectives, and 303(d) impairments that apply to the Project are provided in the surface water quality discussions in Section 3.8.2, *Environmental Setting*.

NPDES General Construction Stormwater Permit

The General NPDES Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ) (Construction General Permit) regulates stormwater discharges for construction activities CWA Section 402. Dischargers whose projects

[1] The "tributary rule" refers to any streams not specifically listed in the basin plan that are deemed to have the same beneficial uses and water quality objectives of the listed stream, river or lake to which they are a tributary.

disturb 1 or more acres of soil, or whose projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 or more acres, are required to obtain coverage under the Construction General Permit. 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) that the discharger will use to protect stormwater runoff and document the placement and maintenance of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants, to be implemented in case of a BMP failure; and a monitoring plan for turbidity and pH for projects that meet defined risk criteria (California State Water Resources Control Board 2011). The requirements of the SWPPP are based on the construction design specifications detailed in the final design plans of a project and the hydrology and geology of the site expected to be encountered during construction. The local or lead agency requires proof of coverage under the CGP prior to building permit issuance. The SWPPP is submitted to the State Water Resources Board, and a copy is kept at the jobsite where it is updated during different phases of construction. The SWPPP must be available for inspection and review upon request.

Since the land disturbance for each of the three campuses would be greater than 1 acre, a Construction General Permit is required for the Project activities on each campus.

NPDES General Municipal Stormwater Permit

CWA Section 402 mandates permits for municipal stormwater discharges, which are regulated under the NPDES General Permit for Municipal Separate Storm Sewer Systems (MS4) (MS4 Permit). Phase I MS4 regulations cover municipalities with populations greater than 100,000, certain industrial processes, or construction activities disturbing an area of 5 acres or more. Phase II (Small MS4) regulations require that stormwater management plans be developed by municipalities with populations smaller than 100,000 and construction activities disturbing 1 or more acres of land area. The State Water Board adopted a Statewide Phase II Small MS4 General Permit in 2013 to efficiently regulate discharges from numerous, qualifying, small MS4's under a single permit. Small MS4's were categorized as either "Traditional" or "Non-Traditional." Traditional MS4's operate throughout a community. Non-Traditional MS4's are MS4's which are similar to a Traditional MS4 but operate at a separate campus facility. Most non-Traditional MS4's throughout California were not designated as having to comply with the statewide Phase II Small MS4 General Permit, although the State Water Board reserved the right to allow the Regional Water Boards to designate through due process any single Non-Traditional MS4 if it deemed necessary.

MS4 permits require that cities and counties develop and implement programs and measures to reduce the discharge of pollutants in stormwater discharges to the maximum extent possible, including management practices, control techniques, system design and engineering methods, and other measures as appropriate. As part of permit compliance, these permit holders have created stormwater management plans (SWMP) for their respective locations. These plans outline the requirements for municipal operations, industrial and commercial businesses, construction sites, and planning and land development. These requirements may include multiple measures to control pollutants in stormwater discharge. During implementation of specific projects under the program, project applicants will be required to follow the guidance contained in the stormwater management plans as defined by the permit holder in that location.

The State Water Board is advancing Low Impact Development (LID) in California as a means of complying with municipal stormwater permits. LID incorporates site design, including among other things the use of vegetated swales and retention basins and minimizing impermeable surfaces, to manage stormwater to maintain a site's predevelopment runoff rates and volumes.

The District has adopted a comprehensive Stormwater Management Program (SWMP). The SWMP aligns with the U.S. EPA Phase II NPDES requirements promulgated under the CWA, and specifically with the State Water Board's Phase II Small MS4 Permit (Order No. 2013-0001 DWQ) that was adopted on February 5, 2013. While not designated as such, the District does operate similarly to non-traditional MS4, which is defined by the Phase II Small MS4 Permit as an entity that is operated similarly to a traditional MS4, but is operated at a separate campus or facility. Examples of nontraditional MS4s include universities, state hospitals, state prisons, school districts, and other special districts. The SWMP is discussed further in Section 3.8.1.3.

California Department of Pesticides Regulation

California Department of Pesticides Regulation (DPR) is the lead agency for regulating the registration, sale, and use of pesticides in California. It is required by law to protect the environment, including surface waters, from adverse effects of pesticides by prohibiting, regulating, or controlling the uses of such pesticides. DPR has both a Surface Water and Groundwater Protection Program that addresses sources of pesticide residues in surface waters and has preventive and response components that reduce the presence of pesticides in surface and ground waters. The preventive component includes local outreach to promotion of management practices that reduce pesticide runoff and prevents continued movement to groundwater in contaminated areas. In order to promote cooperation to protect water quality from the adverse effects of pesticides, DPR and the State Water Board signed a Management Agency Agreement (MAA). The MAA, and its companion document, *The California Pesticide Management Plan for Water Quality*, are intended to coordinate interaction, facilitate communication, promote problem solving, and ultimately assure the protection of water quality.

Although the District landscape maintenance practices avoid use of pesticides, herbicides and fertilizers when possible, the operation and maintenance of landscaped areas and lawns on the campuses may require the use of pesticides, and District would be required to comply with DPR regulations.

3.8.1.3 Local

As stated in Section 2.6 of Chapter 2, *Project Description*, the District is exempt from the application of city and county zoning ordinances, except the proposed residential complex at Skyline College because it is a non-educational use. However, the current zoning and applicable general plan provisions for each campus are provided for informational purposes. These provisions are described following the below discussions of the District's Stormwater Management Program and College Sustainability Plans.

District Stormwater Management Program

The District has adopted a comprehensive SWMP that aligns with the requirements of the Phase II Small MS4 Permit (MS4 Permit). The District implements the SWMP on all three campuses. The purposes of the SWMP are as follows.

- Identify the various sources (pollutant and constructed facilities) that could potentially affect the quality and quantity of storm water discharges.
- Establish BMPs for municipal and construction activities and campus community education to reduce contamination in storm water.
- Establish measurable goals to assess the effectiveness of BMPs that are designated to reduce discharge of pollutants into the storm drain system and associated waterways.

As part of its SWMP, the District implements the following six Minimum Control Measures including.

- Public outreach and education.
- Campus-wide involvement and participation.
- Illicit discharge detection.
- Construction site runoff.
- Post construction site runoff in new development and redevelopment.
- Pollution prevention/good housekeeping for facilities operation and maintenance.

The District maintains its SWMP with the aid of the District's Stormwater Working Group, which is composed of faculty and sustainability management staff from each of the three campuses (Cañada College, CSM, and Skyline College) as well as from the District offices. The District proactively participates in educational outreach, trains staff on requirements of the SWMP, and implements good housekeeping measures. As part of the SWMP requirements, the District has mapped stormwater discharge locations within the campuses and implemented source control measures. The District also requires construction contractors to follow the rules of the SWMP and implement BMPs during construction of facility improvements on the campuses. Landscape maintenance practices seek to avoid use of pesticides, herbicides and fertilizers. BMPs are continually monitored, evaluated, and emphasized during campus operations, maintenance, and construction.

The SWMP specifies BMPs to manage postconstruction stormwater flows, and applicable projects are required to be designed at a minimum to the requirements of the Construction General Permit requirements for postconstruction, to prevent or minimize water quality and quantity impacts to the maximum extent practicable. This is typically accomplished through LID techniques, including infiltration and other site features. Provision C.3 applies to new development and redevelopment projects that involve the creation/replacement of 10,000 square feet or more of impervious surface.

College Sustainability Plans

The District has adopted sustainability plans for each of its three campuses that commit the District to controlling runoff from new development and minimizing the use of toxic chemicals both in maintenance activities and in pest control. These plans include the (1) Cañada College Sustainability Plan, (2) College of San Mateo Sustainability Plan, and the (3) Skyline College Sustainability Plan.

Water conservation and efficiency is an integral component of sustainability and is aggressively pursued by all three colleges. The District strives to reduce potable water use as well as wastewater discharges to both the sewer and storm water systems. In addition, the District reduces wastewater pollution by minimizing chemical use in cleaning and landscaping practices. Each college has a number of programs and future plans for water conservation and efficiency.

The District has made water conservation a priority for both environmental purposes and in order to achieve cost savings. To meet established goals, the colleges developed and implemented water conservation programs and projects. All three colleges have installed artificial turf on sports fields, saving CSM and Skyline College approximately 5.8 million gallons of water and $370,000 per year in water costs and saving Cañada College approximately 2 million gallons of water and approximately $100,000 per year in water costs (Cañada College 2013; College of San Mateo 2013; Skyline College 2013). In addition to eliminating the need for irrigation, the use of air polluting lawn mowers, chemical pesticides and fertilizers, and maintenance and labor were also reduced. Cañada College will explore water conservation and efficiency programs from the local water utility, low-flow water equipment, and opportunities for grey water use (Cañada College 2013).

The District's comprehensive SWMP has been established to mitigate the risk of quantitative or qualitative impacts to surrounding waterways. A primary component of the SWMP is a commitment to net-zero increase in stormwater runoff from the site. The District recognizes that stormwater can be a prime source of pollutants entering the environment and place the campus at risk for fines or other regulatory penalties. To reduce these discharges, the colleges employ numerous strategies as outlined in the SWMP.

The District works closely with the Regional Water Board and other local jurisdictions to achieve a "net-zero" runoff rate for new projects. They have stenciled "No Dumping, Flows to Bay" signage clearly marked near all campus drains, encouraging the campus community to respect and preserve California's waterways. Through the SWMP, the District will continue to look to explore ways to reduce storm water runoff, including rainwater catchment. In an effort to reduce and control chemical usage, the colleges work actively with vendors, suppliers, and maintenance staff to effectively manage, reduce, and responsibly use chemicals throughout each campus.

As part of the District design standards and critical component of the District's Water Efficiency Program (WEP), the District has adopted sustainable landscaping practices at each campus. Sustainable landscaping practices conserve water and help contribute to achieving many other goals for sustainability. Where feasible, the colleges have exchanged traditional grass for artificial turf or low-maintenance ground-covering plants that require less water. Drought tolerant plants are prioritized on campus for all new and replanted landscaping. The colleges will continue existing practices and also promote the use of native plants in campus landscapes. Further, the colleges will consider planting trees that provide shade at appropriate locations and use pruning techniques that maximize shade.

The District installed a weather-based irrigation control system at CSM and Skyline College that adjusts sprinkler settings according to real-time weather. This allows the District to conserve water by irrigating landscaping only when necessary. Cañada College is exploring using a similar technology.

Redwood City General Plan

The northeast portion of Cañada College is in Redwood City. Relevant goals and policies pertaining to hydrology and water quality are listed in the Public Safety Element and Natural Resources Element of the Redwood City General Plan (2010).

Public Safety Element

Goal-7. Provide adequate and appropriately-designed storm drainage and flood control facilities to meet current and future needs and minimize the risk of flooding.

Policy 7.1. Avoid or minimize the risks of flooding to new development. Carefully evaluate whether new development should be located in flood hazard zones, and identify construction methods or other methods to minimize damage if new development is located in flood hazard zones.

Policy 7.2. Improve the drainage system's level of service to minimize storm flooding.

Policy 7.3. Strive to maintain the structural and operational integrity of essential public facilities during flooding. Locate, when feasible, new essential public facilities outside of flood hazard zones; identify construction methods or other methods to minimize damage if these facilities are located in flood hazard zones. Essential public facilities include City government operations facilities, police and fire facilities, and hospitals.

Policy 7.4. Prioritize improvements to Redwood City's storm drain system in areas that are prone to flooding. Encourage the use of preventive and low-impact measures as well as maintaining, upgrading, and constructing new flood prevention infrastructure to reduce the risk of flooding.

Policy 7.5. Consult with public agencies responsible for flood protection, including the U.S. Army Corps of Engineers, FEMA, and the California Department of Water Resources to maintain the most current flood hazard and floodplain information and use it as a basis for project review of flood protection systems such as levees and to guide development in accordance with federal, State, and local standards.

Policy 7.6. Minimize impervious surfaces to reduce stormwater runoff and increase flood protection.

Policy 7.7. Consult with "upstream" jurisdictions to:

- Minimize the runoff from these areas into Redwood City's drainage system. Work with the jurisdictions located within the Redwood City watershed area, including San Carlos, Woodside, Menlo Park, Atherton, and San Mateo County
- Pursue policies and measures to minimize runoff and reduce flooding while sharing the costs of major capital improvements.

Policy 7.8. Address flooding potential as a result of sea level rise.

Natural Resources Element

Goal NR-7.1. Reduce pollution from stormwater runoff in our creeks and the San Francisco Bay.

Policy 7.1. Preserve and protect riparian and wetland plants, wildlife and associated habitats, and where feasible, incorporate public access.

Policy 7.2. Encourage the use of the site and landscape designs that minimize volume and pollutant concentrations.

Policy 7.3. Promote continued maintenance, restoration, and daylighting of creeks in Redwood City through ecologically enhancing methods and any future enhancement ordinance.

Town of Woodside General Plan

The majority of Cañada College is in Woodside. Relevant goals and policies pertaining to hydrology and water quality are listed in the Conservation Element and Public Utilities Element of the Woodside General Plan.

Conservation Element

Goal CV1. Maintain a healthy natural environment

Policy 1.2. Protect riparian corridors and water quality

Public Utilities Element

Goal PU8. Manage storm water drainage to minimize erosion and runoff.

Policy 8.1. Retain storm water runoff

Policy 8.2. Utilize natural drainage

Policy 8.3. Maintain natural drainage ways

Policy 8.4. Control erosion, sedimentation, and flooding

City of San Mateo General Plan

CSM is located in the city of San Mateo. Relevant goals and policies pertaining to hydrology and water quality are listed in the Safety element of the San Mateo General Plan (2010).

Safety Element

Goal 2. Protect the community from unreasonable risk to life and property caused by flood hazards.

Policy 2.1. Prevent erosion of creek banks.

Policy 2.3. Protect new development within a flood plain.

Policy 2.5. Implement the improvements identified in the City of San Mateo's seven watershed areas to improve and maintain drainage capacity adequate to convey water during a typical storm event.

Policy 2.6. Protect lowlands from the potential rise in the sea level, high tides and tsunamis. Protect new habitable buildings in areas subject to flooding in the event of levee failure.

City of San Bruno General Plan

Skyline College is located in San Bruno. Relevant goals and policies pertaining to hydrology and water quality are listed in the Environmental Resources and Conservation Element, Land and Urban Use Design Element, and Open Space and Recreation Element of the San Bruno General Plan (2008).

Environmental Resources & Conservation

Policy 1—ERC-A. Preserve open space essential for the conservation of San Bruno's natural resources—including vegetation, wildlife, soils, water, and air.

Policy 2—ERC-D. Reduce pollution levels within the surface water that San Bruno discharges into the San Mateo County Flood Control District, then into San Francisco Bay.

Policy 5—ERC-4. Encourage the use of Best Management Practices in conserving the city's valuable water supply sources.

Policy 6—ERC-6. Preserve wetland habitat in the San Francisco Bay Margins along the eastern edge of city land as permanent open space (Figure 6-1).

Policy 7—ERC-A. Preserve open space essential for the conservation of San Bruno's natural resources—including vegetation, wildlife, soils, water, and air.

Policy 8—ERC-D. Reduce pollution levels within the surface water that San Bruno discharges into the San Mateo County Flood Control District, then into San Francisco Bay.

Water Resources

Policy 1—ERCRC-19. Regulate new development—specifically industrial uses—as well as construction and demolition practices to minimize pollutant and sediment concentrations in receiving waters and ensure water bodies within San Bruno and surface water discharged into San Francisco Bay meets or exceeds relevant regulatory water quality standards.

Policy 2—ERCRC-20. Require implementation of Best Management Practices to reduce accumulation of non-point source pollutants in the drainage system originating from streets, parking lots, residential areas, businesses, and industrial operations.

Policy 3—ERCRC-21. Continue programs to inform residents of the environmental effects of dumping household waste, such as motor oil, into storm drains that eventually discharge into San Francisco Bay.

Policy 4—ERCRC-22. Regularly measure and monitor water quality in San Bruno's surface water to ensure maintenance of high quality water for consumption by humans and other species throughout the region.

Policy 5—ERCRC-23. Regulate new development to minimize stormwater runoff rates and volumes generated by impervious surfaces, and maximize recharge of local groundwater aquifers when feasible. Utilize the recommendations provided in the Bay Area Stormwater Management Agency's Start at the Source Design Guidance Manual for Stormwater Quality Protection.

Policy 6—ERCRC-24. Require that new development incorporate features into site drainage plans that reduce impermeable surface area and surface runoff volumes.

Land Use & Urban Design

Policy 1—LUD-64. Require industrial uses to meet air and water LUD-64 quality standards, to properly store and dispose of hazardous substances, and to avoid adverse impacts on the environment.

Policy 2—LUD-76. Assure that new development mitigates impacts LUD-76 on existing public services, including transit services, water, sewer, and storm drainage systems, police and fire protection, libraries, and parks and recreation facilities.

Open Space and Recreation

Policy 1—OSR-E. Recognize open spaces—Crestmoor Canyon, Junipero Serra County Park, San Francisco Peninsula Watershed lands, Golden Gate National Recreation Area, SFO wetlands, and neighborhood canyons—as an integral part of the overall image of the city.

Policy 2—OSR-27. Coordinate with San Francisco Public Utilities District and National Park Service to ensure that the San Francisco Peninsula Watershed and Golden Gate National Recreation Area are maintained as pristine natural habitat areas.

Policy 3—OSR-32. During plan review, assure that development on city lands is compatible with preservation of Crestmoor Canyon, Junipero Serra Park, San Francisco Peninsula Watershed lands, Golden Gate National Recreation Area, and San Francisco International Airport wetlands in a natural state.

City of San Bruno Municipal Code

San Bruno municipal codes and ordinances relevant to hydrology and water quality are listed below.

Chapter 10.18. Storm Water Management and Discharge Control Ordinance

The intent of this ordinance is to protect and enhance the water quality of our watercourses, water bodies, and wetlands in a manner pursuant to and consistent with the Clean Water Act. (Ord. 1558 § 1, 1994)

10.18.065 Discharge of pollutants. The discharge of non-storm water discharges to the city storm sewer system is prohibited. All discharges of material other than storm water must be in compliance with a NPDES Permit issued for the discharge (other than NPDES Permit No. CA0029921) and this ordinance.

A. Exceptions to Discharge Prohibition. The following discharges are exempt from the prohibition set forth in this section.

1. The prohibition on discharges shall not apply to any discharge regulated under a National Pollutant Discharge Elimination System (NPDES) permit issued to the discharger and administered by the state of California under authority of the United States Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit and other applicable laws or regulations.

2. Discharges from the following activities will not be considered a source of pollutants to waters of the United States when properly managed: water line flushing and other discharges from potable water sources, municipal street cleaning, municipal park maintenance, landscape irrigation and lawn watering, irrigation water, diverted stream flows, rising ground waters, infiltration to separate storm drains, uncontaminated pumped ground water, foundation and footing drains, water from crawl space pumps, air conditioning condensation, springs, individual residential car washings, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, or flows from firefighting and other emergency response activity, and accordingly are not subject to the prohibition on discharges. (Ord. 1558 § 1, 1994)

10.18.070 Discharge in violation of permit. Any discharge that would result in or contribute to a violation of NPDES Permit No. CA0029921, the terms of which are incorporated herein by reference, and which is on file in the office of the city clerk, and any amendment, revision or reissuance thereof, either separately considered or when combined with other discharges, is prohibited. Liability for any such discharge shall be the responsibility of the person(s) causing or responsible for the discharge, and such persons shall defend, indemnity, and hold harmless the city in any administrative or judicial enforcement action relating to such discharge. (Ord. 1558 § 1, 1994)

10.18.090 Reduction of pollutants in storm water. Any person engaged in activities which will or may result in pollutants entering the city storm sewer system shall undertake all practicable measures to reduce such pollutants. Examples of such activities include ownership and use of facilities which may be a source of pollutants such as parking lots, gasoline stations, industrial facilities, commercial facilities, stores fronting city streets, etc. The following minimal requirements shall apply:

A. Littering. No person shall throw, deposit, leave, maintain, keep, or permit to be thrown, deposited, placed, left or maintained, any refuse, rubbish, garbage, or other discarded or abandoned objects, articles, and accumulations, in or upon any street, alley, sidewalk, storm drain inlet, catch basin, conduit or other drainage structure, business place, or upon any public or private lot of land in the city, so that the same might be or become a pollutant, except in containers or in lawfully established dumping grounds.

B. Standard for Parking Lots and Similar Structures. Persons owning or operating a parking lot, gas station pavement or similar structure shall clean those structures as frequently and thoroughly as practicable in a manner that does not result in discharge of pollutants to the city storm sewer system.

C. Best Management Practices for New Developments and Redevelopments. Any construction contractor performing work in the city shall endeavor, whenever possible, to provide filter materials at the catch basin to retain any debris and dirt flowing in to the city's storm sewer system. City may establish controls on the volume and rate of storm water runoff from new developments and redevelopments as may be appropriate to minimize the discharge and transport of pollutants.

D. Compliance with Best Management Practices. Where best management practices guidelines or requirements have been adopted by the city for any activity, operation, or facility which may cause or contribute to storm water pollution or contamination, illicit discharges, and/or discharge of non-storm water to the storm water system, every person undertaking such activity or operation, or owning or operating such facility shall comply with such guidelines or requirements as may be identified by the director of public works. (Ord. 1558 § 1, 1994)

Chapter 12.16. Grading Regulations

12.12.050 Erosion control. A complete and detailed plan for erosion control shall be prepared and included within the grading plan. If planting is proposed, the specification shall be prepared by a registered landscape architect or landscape contractor and shall indicate the material and methods for slope control planting and planting to return the slope to its native appearance, including ground covers, trees and shrubs, and with special emphasis on the following:

A. Soil preparation, fertilization, plant material, and methods of planting; and

B. Initial maintenance of the plant material and slopes until a specified percentage of plant coverage is established uniformly on the cut and fill slopes.

The erosion control plan shall contain calculations showing estimated surface water runoff on the site and maintenance of non-vegetative erosion control measures. Vegetative control measures shall be in accordance with Association of Bay Area Governments Manual for Surface Runoff Control Measures, pages 1-50 through 1-57, inclusive. (Ord. 1369 § 1, 1981; prior code § 9-1.7(f))

3.8.2 Environmental Setting

Regional climate conditions tend to be mild during the summers and winters with average temperatures in the mid-60s, and cool during winter, when temperatures tend to be in the low-50s. Climate in San Mateo County is largely influenced by the marine layer surrounding San Francisco Bay. The warmest months of the year are from July through September, with an average maximum temperature of 82 degrees Fahrenheit (°F) in July in San Mateo, while the coldest months of the year are December and January, with an average minimum temperature of 40°F in San Mateo. The annual average precipitation is 20.45 inches. Winter months tend to be wetter than summer months. The wettest month of the year is February, with an average rainfall of 4.09 inches.

The District's observations have found that each campus experiences microclimatic conditions beyond the extreme ends of the average area temperature range. Being closer to the coast of the Pacific Ocean, Skyline College, for example, can be as much as 40°F cooler than the College of San Mateo, which is located farther south and inland from the ocean, on a summer day (San Mateo County Community College District 2013).

3.8.2.1 Cañada College

Cañada College is approximately 124 acres in area and is located in the foothills of southern San Mateo County in Redwood City, just to the east of Interstate 280 (I-280). The topography of the campus is relatively hilly. The campus sits back and atop a hill above the surrounding valleys. Cañada College is the southernmost campus in the district. The campus consists of administrative offices, classrooms, laboratories, maintenance facility, corporation yard, lawn and garden areas, athletic fields, parking lots, and open space vegetated with grasses and trees.

Surface Hydrology

The hydrological features near each campus are shown in **Figures 3.8-1a** through **3.8-1c**. Cañada College is within both the South San Francisco Bay (South Bay) and Santa Clara watersheds, both of which drain to Lower San Francisco Bay (**Figure 3.8-1a**). More specifically, Cañada College is located within San Francisquito Creek and Redwood Creek subwatersheds of the larger South Bay watershed. However, flows from the campus are directed toward Redwood City's storm system within the Redwood Creek Drainage Area to the north, and not to the San Francisquito Creek drainage area to the south. Although the campus is also located within the Santa Clara watershed, all onsite drainage eventually flows into the South Bay watershed via Redwood Creek (County of San Mateo Public Works 2015).

No streams, creeks, or other surface water bodies are found within Cañada College or its immediate vicinity. The topography surrounding Cañada College campus is hilly. The campus drains outward in all directions toward its property boundary, and storm drainage is discharged from multiple locations. The majority of runoff drains to the northeast into Redwood City via the Redwood Creek drainage area and ultimately into San Francisco Bay. Redwood Creek and its tributary, Arroyo Ojo de Agua Creek, are the closest receiving waters to the Cañada College campus. A few outfalls which discharge to the south first discharge runoff into the town of Woodside before entering the Redwood City storm drainage system. Storm drain facilities include a network of pipes consisting of a combination of corrugated metal pipe (CMP), reinforced concrete pipe (RCP), polyvinyl chloride pipe (PVC), and high density polyethylene (HDPE) pipe. Older pipe networks tend to be composed of concrete and corrugated metal pipe. Newer construction uses more HDPE and PVC pipe (San Mateo County Community College District 2013).

Groundwater Hydrology

Cañada College is within the San Mateo Plain Subbasin of the larger Santa Clara Valley Groundwater Basin. Natural recharge occurs by infiltration of water from streams that enter the valley from the upland areas within the drainage basin and by percolation of precipitation that falls directly on the valley floor (Department of Water Resources 2004). Groundwater in the Project area may fluctuate seasonally due to changes in precipitation, underground drainage patterns, and other factors.

Redwood City relies 100% on imported surface water from the San Francisco Public Utilities Commission (SFPUC) Hetch Hetchy regional water system (City of Redwood City Public Works Department 2011). However, to meet anticipated future demands, SFPUC has set as a performance objective, the expanded use of other sources of water by its 29 wholesale customers, including Redwood City. The plan includes greater use of recycled water, groundwater, and other water sources (City of Redwood City 2012). More information on water supplies is provided in Section 3.12, *Public Services and Utilities*.

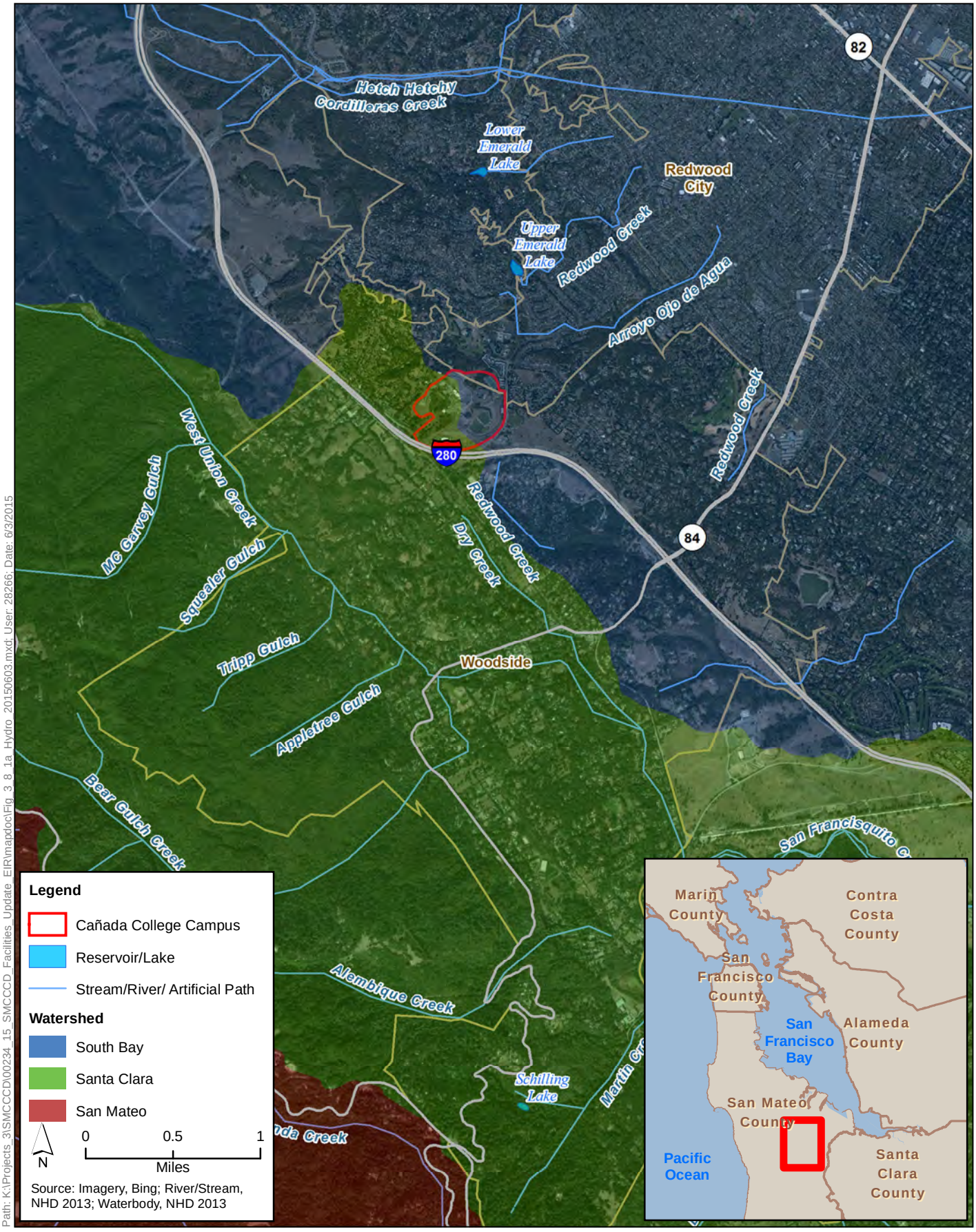
Water Quality

Water quality in a typical surface water body is influenced by processes and activities that take place within the watershed. In a developed urban environment, such as is present on the campus, water quality is affected primarily by discharges from both point and nonpoint sources. Point and nonpoint sources include winter storms, overland flow, construction sites, exposed soil, roofs, parking lots, and streets. Water quality in the Project vicinity is directly affected by stormwater runoff from adjacent streets and properties delivering fertilizers, pesticides, metals, hydrocarbons, and other pollutants. Typically, pollutant levels in the creeks are highest following the first storm flows of the season when constituents accumulated during the dry season are "flushed" into the creeks.

Existing pollutants of concern at Cañada College originating from administrative buildings, laboratories, maintenance facility, corporation yard, lawn and garden areas, athletic facilities, parking lots include the typical pollutants from trash, cleaning solvents, laboratory chemicals, oil and grease, vehicle lubricants, and pesticides. Impervious surfaces associated with parking lots within the campus are sources of hydrocarbons, sediment and metals such as copper. Runoff generated from parking lots and roadways can contribute to pollutants found in nearby water bodies such as Redwood Creek and Arroyo Ojo del Agua. Campuses may also generate trash and other waste. However, garbage cans are strategically placed around the campus, and good housekeeping practices are implemented regularly that prevent trash from entering waterways. Many of the same pollutants could be found in adjacent land uses, such as the residential areas, Emerald Hills Golf Course, and I-280.

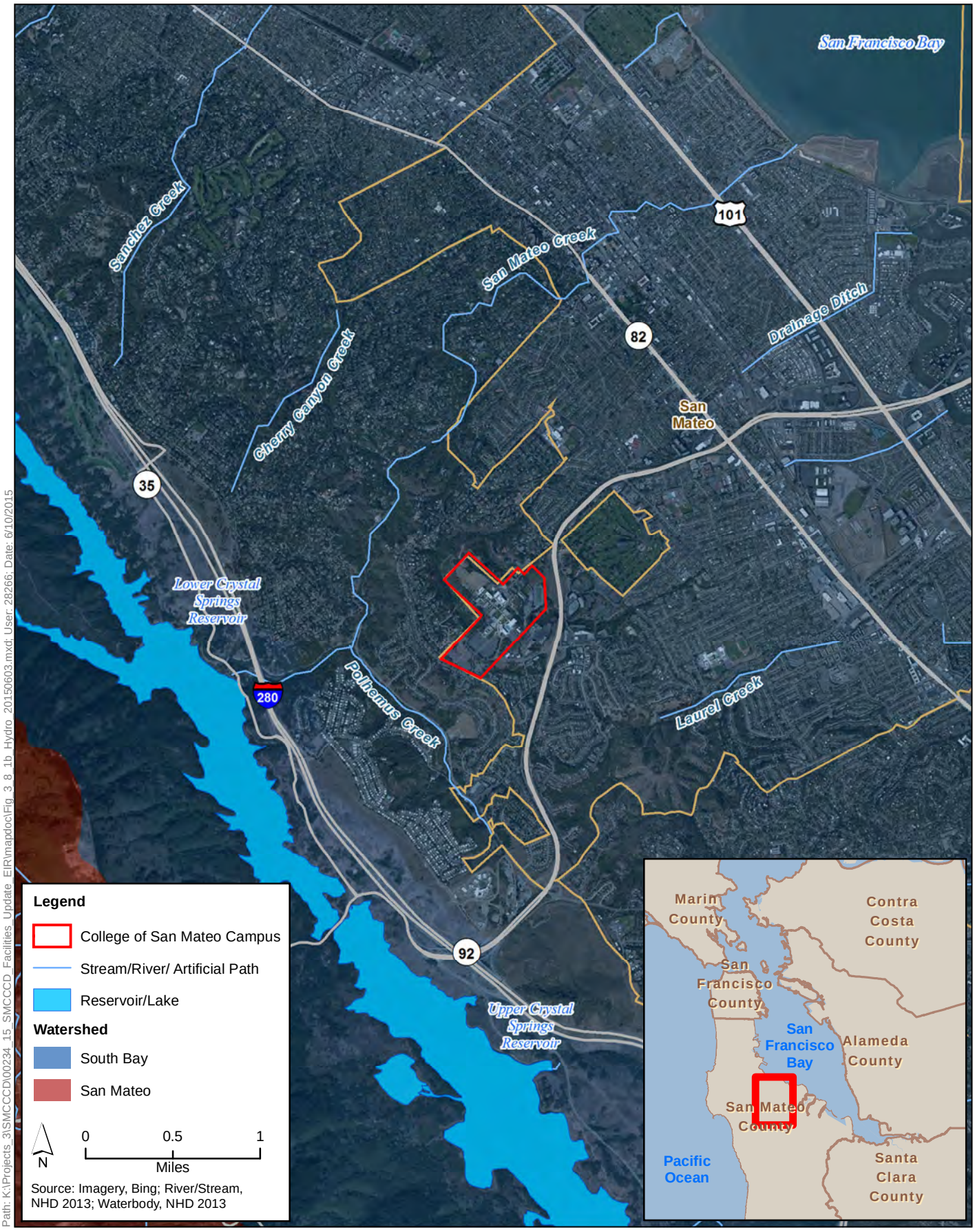
There are no water bodies within the Cañada College campus (California State Water Resources Control Board 2011). There are no 303(d) listed impairments for Redwood Creek or Arroyo Ojo del Agua. Because the majority of flows discharge to the Redwood Creek subwatershed, which ultimately flows to the South San Francisco Bay, the 303(d) impairments for South San Francisco Bay apply.

The Basin Plan describes the beneficial uses of the Arroyo Ojo del Agua and South San Francisco Bay, as shown in **Table 3.8-1**. Water quality objectives for the San Francisco Bay Regional Water Quality Control Board are shown in **Table 3.8-2**. **Table 3.8-3** shows 303(d) listed impairments for the South San Francisco Bay region based on the 2010 California Integrated Report (California State Water Resources Control Board 2011). Redwood Creek and its tributaries are not listed as impaired water bodies, so impairments are only listed for the South San Francisco Bay.



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Figure 3.8-1a
Hydrological Features near Cañada College



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Figure 3.8-1b
Hydrological Features near College of San Mateo



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Figure 3.8-1c
Hydrological Features near Skyline College

Table 3.8-1. Designated Beneficial Uses for Surface Water Bodies within the Vicinity of Cañada College

Water Body	Designated Beneficial Uses
Redwood Creek (San Mateo)	Warm freshwater habitat; wildlife habitat; water contact recreation; noncontact water recreation.
Arroyo Ojo de Agua	Warm freshwater habitat; wildlife habitat; water contact recreation; noncontact water recreation.
South San Francisco Bay	Industrial service supply; commercial; shell fish harvesting; estuarine habitat; fish migration; preservation of rare and endangered species; fish spawning; wildlife habitat; water contact recreation; noncontact water contact recreation, navigation.

Source: San Francisco Bay Regional Water Quality Control Board 2006.

Table 3.8-2. Water Quality Objectives for Surface Waters in the Project Vicinity

Constituent	Water Quality Objective
Bacteria	Various concentrations based on designated beneficial use.
Bioaccumulation	Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life.
Biostimulatory substances	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
Color	Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses.
Dissolved oxygen	For nontidal waters, cold water habitat: 7.0 mg/l minimum. The median dissolved oxygen concentration for any 3 consecutive months shall not be less than 80% of the dissolved oxygen content at saturation.
Floating material	Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.
Oil and grease	Waters shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.
Population and community ecology	Waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce significant alterations in population or community ecology or receiving water biota. In addition, the health and life history characteristics of aquatic organisms in waters affected by controllable water quality factors shall not differ significantly from those for the same waters in areas unaffected by controllable water quality factors.
pH	Must be maintained between 6.5 and 8.5, and shall not cause changes greater than 0.5 units in normal ambient pH levels.
Radioactivity	Radionuclides shall not be present in concentrations that result in the accumulation of radionuclides in the foodweb to an extent that presents a hazard to human, plant, animal, or aquatic life.
Salinity	Controllable water quality factors shall not increase the total dissolved solids or salinity of waters of the state so as to adversely affect beneficial uses, particularly fish migration and estuarine habitat.
Sediment	Suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. Controllable water quality factors shall not cause a detrimental increase in the concentrations of toxic pollutants in sediments or aquatic life.

Constituent	Water Quality Objective
Settleable material	Waters shall not contain substances in concentrations that result in the deposition of material that cause nuisance or adversely affect beneficial uses.
Suspended material	Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.
Sulfide	All water shall be free from dissolved sulfide concentrations above natural background levels.
Tastes and odors	Waters shall not contain taste or odor producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or that adversely affect beneficial uses.
Temperature	Enclosed bays and estuaries: objectives are specified in the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California. Surface waters: The natural receiving water temperature of inland surface waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. The temperature of any cold or warm freshwater habitat shall not be increased by more than 5°F (2.8°C) above natural receiving water temperature
Toxicity	All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.
Turbidity	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases from normal background light penetration or turbidity relatable to waste discharge shall not be greater than 10% in areas where natural turbidity is greater than 50 NTU.
Unionized ammonia	Central San Francisco Bay: The discharge of wastes shall not cause receiving waters to contain concentrations of un-ionized ammonia in excess of 0.16 mg/l as nitrogen
Chemical constituents	Surface waters shall not contain concentrations of chemical constituents in amounts that adversely affect any designated beneficial use. Objectives for specific chemical constituents are listed in the San Francisco Bay Water Board Basin Plan.

Source: San Francisco Bay Regional Water Quality Control Board 2010.
mg/l = milligrams per liter
NTU = nephelometric turbidity unit

Table 3.8-3. Overview of Water Quality Impairments in Project Vicinity

Water Body	Listed Impairments Per 2006 303(d) List	Potential Sources	EPA TMDL Completion
South San Francisco Bay	Chlordane	Nonpoint source	Est. 2013
	DDT (Dichlorodiphenyltrichlorothane)	Nonpoint source	Est. 2013
	Dieldrin	Nonpoint source	Est. 2013
	Dioxin compounds (including 2,3,7,8-TCDD)	Atmospheric deposition	Est. 2019
	Furan Compounds	Atmospheric deposition	Est. 2019
	Invasive Species	Ballast water	Est. 2019
	Mercury	Atmospheric deposition, industrial point sources, municipal point sources, natural source, nonpoint source, resource extraction	2008
	PCBs (polychlorinated biphenyls) and Dioxin-Like PCBs	Unknown nonpoint source	2008
	Selenium	Domestic use and groundwater	Est. 2019

Sources: California State Water Resources Control Board 2011.
TCDD = tetrachlorodibenxodioxin
EPA = U.S. Environmental Protection Agency
TMDL = total maximum daily load

Flooding

The FEMA 100-year flood zones for each college are shown in **Figures 3.8-2a** through **3.8-2c**. Cañada College is located on a hilltop at approximately 666 feet above msl and is not located within a FEMA-designated 100-year flood hazard area or an identified dam failure inundation hazard area (Federal Emergency Management Agency 2009; San Mateo County 2006), as shown in **Figure 3.8-2a**. Storms and precipitation patterns as well as topography and other watershed characteristics in the surrounding region generally influence flows in local streams. Because the campus is on a hilltop, the probability of flooding due to peak flows in local streams, dam failure, or other flood hazards is low.

3.8.2.2 College of San Mateo

CSM is located at the northern corridor of Silicon Valley. It is approximately 150 acres and is located in the San Mateo Hills, which sits above surrounding areas at approximately 662 feet elevation. The CSM campus consists of buildings made up of a mix of administrative offices, classrooms, laboratories, maintenance facilities, corporation yards, lawn and garden areas, athletic fields, parking lots and open spaces vegetated with grasses and trees.

Surface Hydrology

CSM is located on the border of the Marina Lagoon and San Mateo Creek sub watersheds of the larger South Bay Watershed (**Figure 3.8-1b**). The San Mateo Creek Watershed contains San Mateo Creek, the headwaters of which begin on Sweeney Ridge and flows southeasterly for approximately 7 miles before entering the northwest arm of Lower Crystal Springs Reservoir. The northeast arm of Lower Crystal Springs Reservoir is formed by San Mateo Creek's tributary, San Andreas Creek. From Crystal Springs Reservoir, San Mateo Creek flows approximately northeast 5 miles through a culvert through downtown San Mateo, where it is partly intermittent and altered, to San Francisco Bay approximately 0.7 mile west of the mouth of Seal Slough. Another tributary to San Mateo Creek is Laguna Creek, which flows northward from Woodside; its source is in Edgewood County Park and Natural Preserve.

The Marina Lagoon watershed is approximately 10 square miles originating in the western hills of San Mateo. The majority of the watershed contains impervious surfaces within highly urbanized areas. Marina Lagoon functions as a flood control basin for the city of San Mateo. The lagoon extends north approximately 4 miles to Belmont City to its outlet at Seal Slough. The primary water source is tidal flow from San Francisco Bay through O'Neil Slough. Laurel Creek also contributes flows to Marina Lagoon (City of San Mateo 2015).

Surface waters have not been observed within the campus. However, Polhemus Creek is located approximately 0.4 mile west of CSM and runs parallel to Polhemus Road. Polhemus Creek is the main tributary to San Mateo Creek. The land around CSM slopes towards Polhemus Creek from an elevation of approximately 666 feet at the campus down to approximately 260 feet at Polhemus Creek.

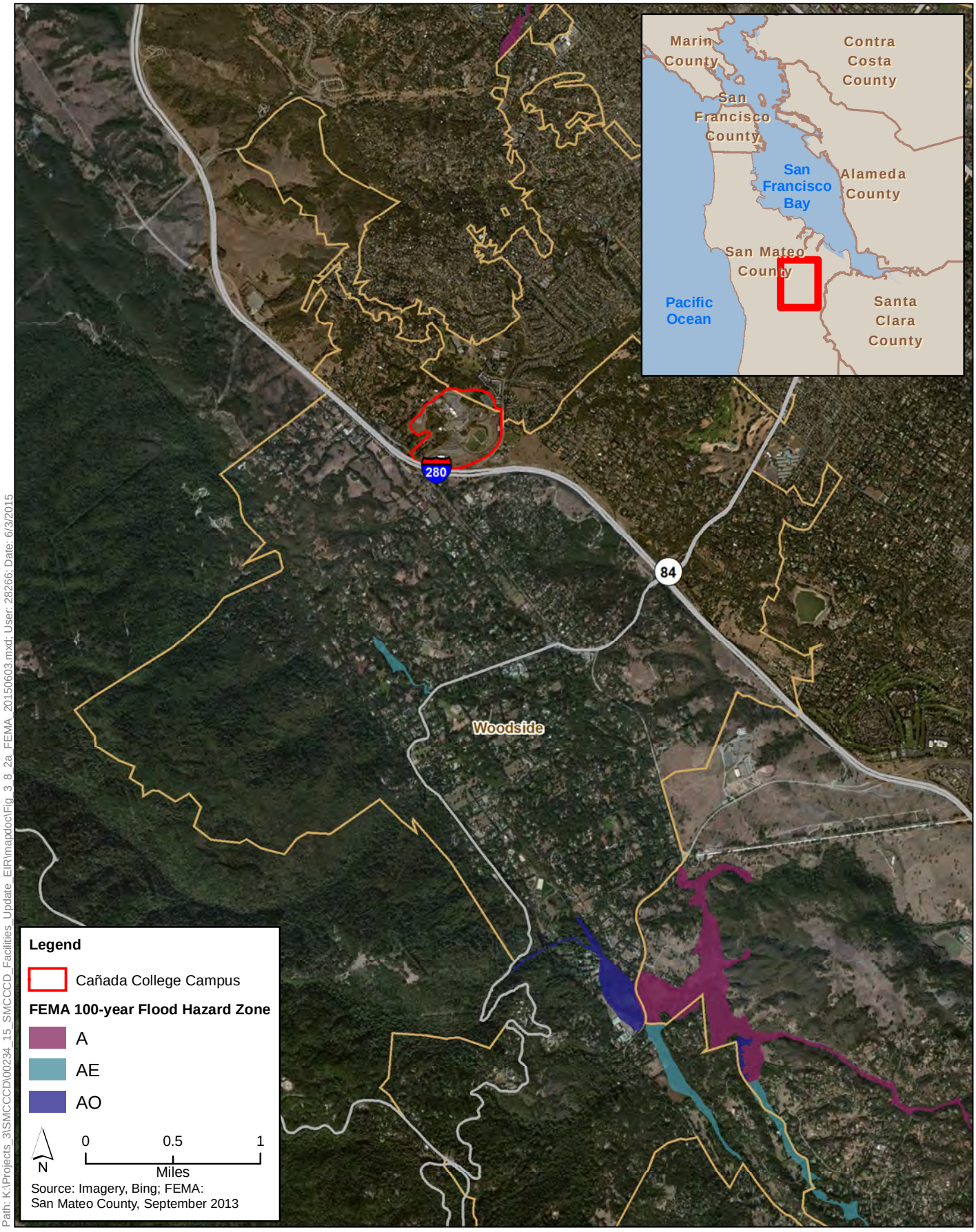
Topography surrounding CSM is relatively hilly. Surrounding slopes angle down to the northeast where stormwater flows to San Mateo Creek, and to the west where stormwater drains to Polhemus Creek. To the east, the lands slopes downward to I-280 and enters the stormwater drainage system connected to the freeway and to the northeast where the hill slope extends down to the urban edge of city of San Mateo. Storm drain facilities at CSM include a network of pipes and structures consisting of variety of materials depending on the age of the facility and renovations since original construction of the campus. Older pipe networks tend to be composed of concrete and corrugated metal pipe. Newer construction uses high density polyethylene and PVC pipe. Recent storm water infrastructure improvements have also included the construction of technologies such as a bioretention pond and detention pipe system (San Mateo County Community College District 2013).

Groundwater Hydrology

As with Cañada College, CSM is located within the San Mateo Plain Subbasin of the Santa Clara Valley Groundwater Basin. General information regarding this subbasin is provided in Section 3.8.2.1, *Cañada College*, under *Groundwater Hydrology*.

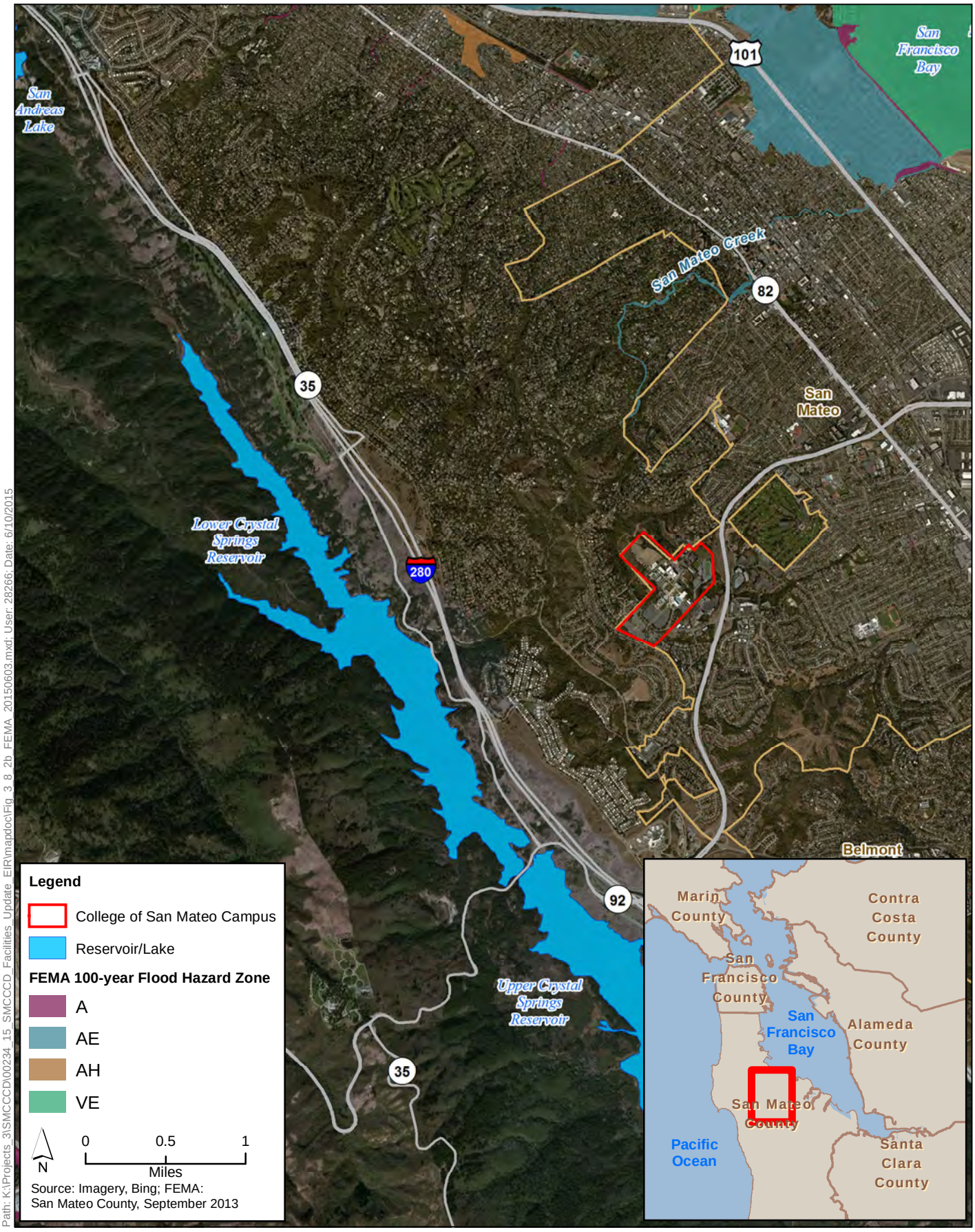
Water Quality

Existing pollutants of concern at CSM are similar to those of Cañada College due to similar land uses, such as administrative buildings, paved parking lots and roads, landscaped areas, pedestrian walkways, athletic facilities, and faculty housing, as well as facility corporation yard and classroom laboratories. Therefore, pollutants such as trash, cleaning solvents, oil and grease, and pesticides may be most prominent onsite.



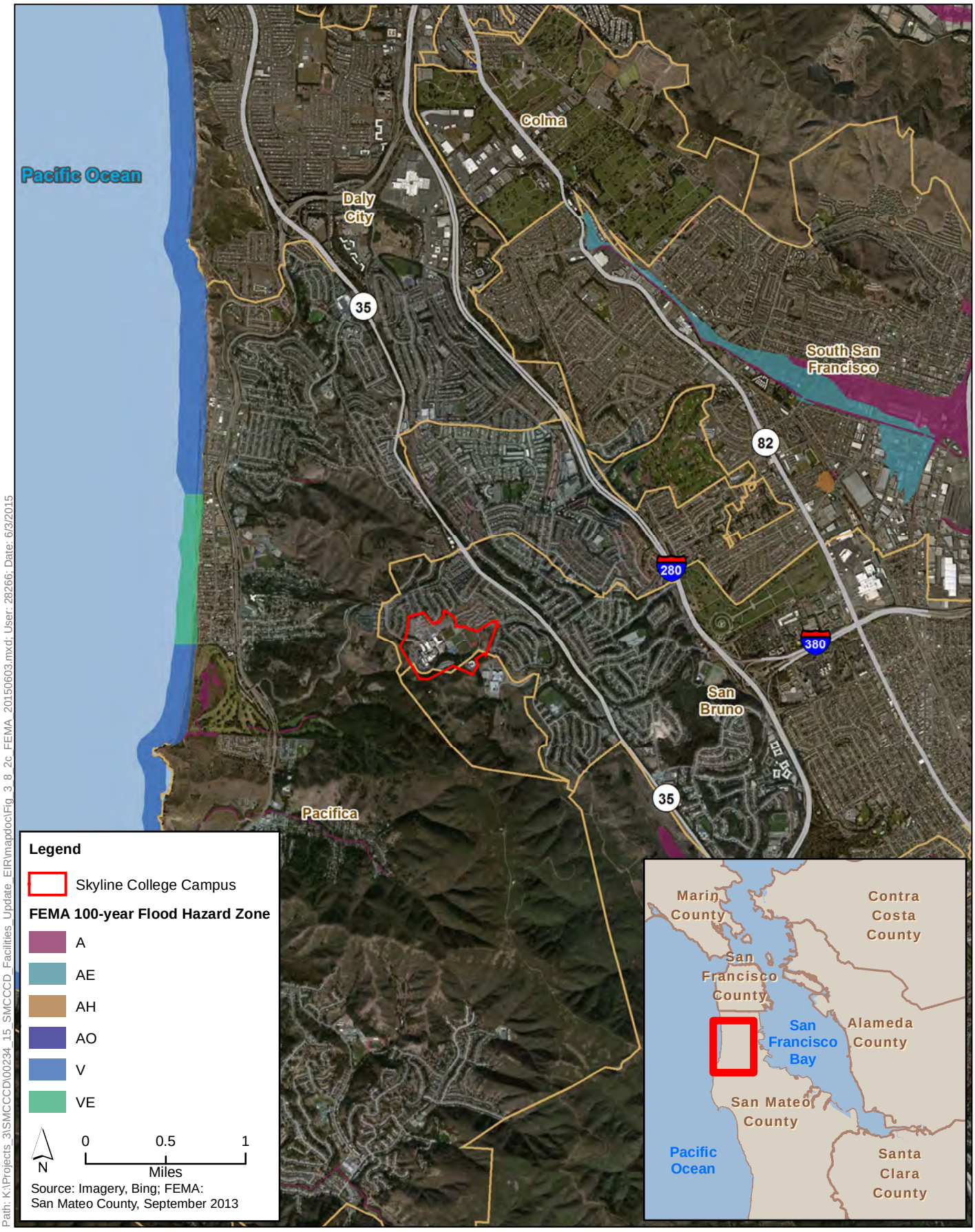
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Figure 3.8-2a
FEMA 100-year flood zones near Cañada College



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Figure 3.8-2b
FEMA 100-year flood zones near College of San Mateo



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Figure 3.8-2c
FEMA 100-year flood zones near Skyline College

In the lower portion of San Mateo Creek, water quality may be affected by sediments entering the creek from nonpoint sources. In addition to these natural sources of sediment, surface water quality in the watershed is also affected by anthropogenic sediment sources. Urbanization has modified the hydrologic characteristics of the watershed, resulting in more rapid and greater peak storm flows, increased creek bed and bank erosion, and higher sediment loads. Sediment can choke the lower portions of stream channels on alluvial fans, diminishing their flood capacity. Although sediment removal activities in the Project area have not been a common occurrence for flood control purposes, it is primarily considered to be a water quality issue.

Designated beneficial uses of the San Mateo Creek are shown in **Table 3.8-4**. Beneficial uses are the same as those shown in **Table 3.8-1**, and therefore, only beneficial uses for San Mateo Creek are shown in **Table 3.8-4**. Water quality objectives are established for the region, and therefore are the same as those described in **Table 3.8-2**. **Table 3.8-5** shows 303(d) listed impairments for San Mateo Creek and Laurel Creek (California State Water Resources Control Board 2011). Polhemus Creek is not listed as a 303(d)-impaired water body, but the Lower San Mateo Creek and Laurel Creek are listed. Impairments for the South San Francisco Bay are the same as those shown in **Table 3.8-3**.

Table 3.8-4. Designated Beneficial Uses for Surface Water Bodies within the Vicinity of College of San Mateo

Water Body	Designated Beneficial Uses
San Mateo Creek	Cold freshwater habitat; fish migration; fish spawning; warm freshwater habitat; wildlife habitat; water contact recreation; noncontact water recreation

Source: San Francisco Bay Regional Water Quality Control Board 2006.

Table 3.8-5. Overview of Water Quality Impairments in Vicinity of College of San Mateo

Water Body	Listed Impairments Per 2006 303(d) List	Potential Sources	EPA TMDL Completion
Laurel Creek	Diazinon	Urban runoff/storm sewers	2007
San Mateo Creek, Lower	Sediment Toxicity	Unknown	Est. 2021

Sources: California State Water Resources Control Board 2011.
EPA = U.S. Environmental Protection Agency
TMDL = total maximum daily load

Flooding

CSM is located on a hilltop at approximately 662 feet above msl and is not located within a FEMA designated 100-year flood hazard area.

Although the likelihood is low, dams within the Project vicinity may be at risk of failure should a major earthquake or other catastrophic event occur. If they fail, it could cause flooding within the Project vicinity. CSM is located near the Lower Crystal Springs Reservoir, but the CSM campus is approximately 300 feet higher in elevation than the reservoir and is on a ridge that is well separated from any possible discharge from the dam. Therefore, CSM is not located within the dam failure inundation area of the Lower Crystal Springs Reservoir.

3.8.2.3 Skyline College

Skyline College is in located in San Bruno and is the District's northernmost campus. Located west of I-280, the campus resides on a hill at the tip of the Santa Cruz Mountains within the Golden Gate National Recreation Area. The Skyline College campus consists of administrative offices, classrooms, laboratories, maintenance facilities, corporation yards, lawn and garden areas, athletic fields, parking lots and open space vegetated with grasses and trees (San Mateo County Community College District 2013).

Surface Hydrology

Skyline College is located in the South Bay and San Mateo Watersheds (**Figure 3.8-1c**). However the majority of runoff flows into the South Bay Watershed via the San Bruno Creek, also known as the San Bruno Creek Watershed. The college is located on a bluff at approximately 660 feet elevation that extends down to a valley where San Bruno Creek flows. San Bruno watershed is part of the larger North San Mateo Watershed Complex. San Bruno Creek, which is now called Colma Creek, is an intermittent stream that rises on the eastern slopes of the Northern Santa Cruz Mountains in San Mateo County. The creek channel descends rapidly from the Santa Cruz Mountains down to the lowlands of San Bruno with channel gradient as steep as 45%. Colma Creek ultimately discharges to San Francisco Bay.

The majority of surface flows from the campus drains to the east, entering the City of San Bruno's storm drain system at College Drive, which flows to Colma Creek and ultimately discharges to San Francisco Bay (South Bay Watershed). In an area in the western portion of the campus (near the proposed Environmental Sciences Building and College Drive), overland surface runoff would flow to the west into drainages along a steep ridge ultimately leading to the Laguna Salada and/or the Pacific Ocean (San Mateo Watershed). Storm drain facilities at the campus include a network of pipes and structures consisting of variety of materials depending on the age of the facility and renovations since original construction of the campus. Older pipe networks tend to be composed of concrete and corrugated metal pipe. Newer construction uses more high density polyethylene and PVC pipe. Recent storm water infrastructure improvements, LID elements, and a range of BMPs have also included pervious concrete, parking lot bioswales, and the incorporation of drought-tolerant landscaping (San Mateo County Community College District 2013).

Groundwater Hydrology

Skyline College is located within the Westside Groundwater Basin, which is the largest groundwater basin in San Francisco. The San Bruno Mountains bound the basin on the east. The San Andreas fault and Pacific Ocean form its western boundary, and its southern limit is defined by a bedrock high that separates it from the San Mateo Plain Groundwater Basin (Department of Water Resources 2004). The basin opens to the Pacific Ocean on the northwest and San Francisco Bay on the southeast (Department of Water Resources 2004).

Together in partnership, SFPUC, the City of Daly City, the City of San Bruno, and California Water Service Company operate the South Westside Groundwater Basin and provide a new 20-billion-gallon regional dry-year groundwater supply through conjunctive water management.[2] In addition

[2] *Conjunctive water management* consists of storing water in wet years and recovering that water for use during dry years.

to participating in conjunctive groundwater management and making efforts to increase recycled water use, the City of San Bruno recently adopted water conservation measures in response to the current California drought. The new water conservation measures involve restrictions on outdoor water use and continued outreach and education. More information on this can be found in Section 3.12, *Public Services and Utilities*.

Sources of recharge for the Westside Groundwater Basin include infiltration of rainfall, infiltration of irrigation water, and leakage from water and sewer pipes. Average groundwater recharge in the basin for water years 1987–1988 was estimated to be 4,846 acre-feet per year (Department of Water Resources 2004). A USGS study covering the period 1987–1992 showed declining water levels. This is likely the result of a concurrent drought during this period (Department of Water Resources 2004).

Based on the field exploration and the groundwater studies conducted by AST on the Skyline College campus, groundwater elevation at the campus is shallow and is considered to be at the approximate depth of 5.0 feet below the existing ground surface (bgs) (AST 2015). Groundwater level and elevation may fluctuate due to variations in the rainfall, geological changes, temperature, pumping water from wells and other factors that were not evident at the time of this investigation. Localized perched water conditions, natural springs, and subsurface seepage may exist and could also be a contributing factor for saturated conditions in the upper layers of the soils and the area in general due to excessive irrigation, over saturated landscape areas, seepage from rainfall or due to the elevated adjacent parcel of land (AST 2015).

Water Quality

Designated beneficial uses of San Bruno/Colma Creek are shown in **Table 3.8-6**. Beneficial uses for the South San Francisco Bay are described in **Table 3.8-1**; therefore, only beneficial uses for Colma Creek are shown in **Table 3.8-6**. Water quality objectives are established for the region and, therefore, are the same as those described in **Table 3.8-2**. **Table 3.8-7** shows 303(d) listed impairments for Colma Creek (California State Water Resources Control Board 2011). Impairments for the South San Francisco Bay are the same as those shown in **Table 3.8-3**.

Table 3.8-6. Designated Beneficial Uses for Surface Water Bodies within the Vicinity of Skyline College

Water Body	Designated Beneficial Uses
San Bruno/Colma Creek	Warm freshwater habitat; wildlife habitat; water contact recreation; noncontact water recreation

Source: San Francisco Bay Regional Water Quality Control Board 2006.

Table 3.8-7. Overview of Water Quality Impairments in Vicinity of Skyline College

Water Body	Listed Impairments Per 2006 303(d) List	Potential Sources	EPA TMDL Completion
Colma Creek	Trash	Illegal dumping, urban runoff/storm sewers	Est. 2021

Sources: California State Water Resources Control Board 2011.
EPA = U.S. Environmental Protection Agency
TMDL = total maximum daily load

Flooding

Skyline College is located on a hilltop at approximately 660 feet above msl and is not located within a FEMA-designated 100-year flood zone or within the 100-year floodplain of San Andreas Reservoir. Floodplains are not present within the San Bruno city limits. Sea level rise could be a contributing factor to flooding within the area towards the last half of the twenty-first century. The District's drainage plan would be designed to contain runoff onsite within the campus and, thus, would not contribute to offsite flood hazards downslope of the campus. Also, the elevation of Skyline College places it well above the future effects of sea level rise.

Skyline College is not located within an area subject to inundation in the event of a dam failure. San Andreas Reservoir and Dam are located near the Skyline College campus, but the campus is approximately 200 feet higher in elevation than the reservoir and is located approximately 4.5 miles northwest of the dam itself since the dam is located at the south end of the lake. Therefore, Skyline College is not located within the dam failure inundation area of San Andreas Reservoir.

3.8.3 Impacts Analysis

3.8.3.1 Methodology

All Project elements were analyzed by comparing existing conditions, as described in Section 3.8.2, *Environmental Setting*, to conditions during construction and/or operations of the Project. The analysis focuses on issues related to surface hydrology, groundwater supply, water quality, and flood hazards. The key construction-related impacts were identified and evaluated qualitatively based on the physical characteristics of the three campuses and the magnitude, intensity, location, and duration of activities.

Surface Water Hydrology: The surface water hydrology impact analysis considered potential changes in the physical characteristics of water bodies, impervious surfaces, and drainage patterns throughout the Project area as a result of Project implementation.

Groundwater Hydrology: Impacts on groundwater supply and recharge were assessed by comparing groundwater use, as well as recharge capabilities with the Project. Recharge is determined by the ability of water to infiltrate into the soil.

Water Quality: Impacts of the Project on surface water and groundwater quality were analyzed by comparing Project versus existing water quality conditions. Potential project-related sources of water contaminants generated or inadvertently released during Project construction and Project operation is considered, along with the potential for water quality objectives to be exceeded and beneficial uses to be compromised.

Flooding: The impact analysis for current flood risk was conducted using FEMA data and historical flood information to determine whether the three campuses overlap with existing current designated 100-year floodplains or has potential for ponding postproject.

3.8.3.2 Significance Criteria

The State CEQA Guidelines Appendix G (14 CCR 15000 et seq.) has identified significance criteria to be considered for determining whether a project could have significant impacts on existing hydrology and water quality resources.

An impact would be considered significant if construction or operation of the Project would have any of the following consequences.

- Violate any water quality standards or waste discharge requirements.
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted).
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite.
- Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Otherwise substantially degrade water quality.
- Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows.
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.
- Contribute to inundation by seiche, tsunami, or mudflow.

3.8.3.3 Impacts and Mitigation Measures

Cañada College

Impact CC-HYD-1: Violate any water quality standards or waste discharge requirements and/or otherwise substantially degrade water quality (less than significant with mitigation)

Construction

Implementation of Project improvements at Cañada College would include construction activities, such as site clearing and grading, new building construction and demolition, renovation of existing facilities, paving and repaving for parking lot expansion and perimeter roads, cut and fill activities, grading and excavation, tree removal, landscaping, and potential renewable energy installations. Land-disturbing activities and placement of stockpiles within proximity to storm drain inlets may also result in a temporary increase in sediment loads to the Redwood Creek subwatershed. Sediment transport to local drainage facilities such as drainage inlets, culverts, and storm drains could also result in reduced storm flow capacity, resulting in localized ponding or flooding during storm events. Sediment can affect surface water quality through interference with photosynthesis, oxygen exchange, and the respiration, growth, and reproduction of aquatic species. Other pollutants, such as nutrients, trace metals, and hydrocarbons, can adsorb to sediment and be transported with sediment to downstream locations and degrade water quality.

The delivery, handling, and storage of construction materials and wastes (e.g., concrete debris), as well as the use of heavy construction equipment, could also result in stormwater contamination, and thereby impact water quality. Construction activities may involve the use of chemicals and operation of heavy equipment that could result in accidental spills of hazardous materials (e.g., fuel and oil) during construction activities that could enter the groundwater aquifer or nearby surface water bodies via runoff or storm drains. Constituents in fuel, oil, and grease can be acutely toxic to aquatic organisms and/or bioaccumulate in the environment. Staging areas or building sites can be sources of pollution because of the use of paints, solvents, cleaning agents, and metals during construction.

All Project construction activities would be subject to existing regulatory requirements. Since the land disturbance for the Project would be more than 1 acre, coverage under a construction general permit would be required. Therefore, all construction activities would comply with the general construction permit from the San Francisco Bay Water Board, which contains standards to ensure that water quality is not degraded. Permittees also have to comply with the appropriate water quality objectives for the region. As part of this permit, standard erosion control measures and BMPs would be identified in a SWPPP and would be implemented during construction to reduce sedimentation of waterways and loss of topsoil. As a performance standard, selected BMPs would represent the best available technology that is economically achievable and the best conventional pollutant control technology to reduce pollutants. Commonly practiced BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater and other nonpoint-source runoff.

Measures would include a range of stormwater control BMPs, for example: installing erosion control such as silt fences, staked straw wattles, and geofabric to prevent silt runoff to storm drains or waterways. Topsoil and backfill would be stockpiled, protected, and replaced at the conclusion of construction activities. Disturbed soil would be revegetated as soon as possible with the appropriate selection and schedule for turf, plants, and other landscaping vegetation. No disturbed surfaces would be left without erosion control measures in place during the wet season, which generally occurs between October 1 and April 30. Project construction at Cañada College is expected to take approximately 7 years (from summer 2016 through fall 2021) and, therefore, some activities would take place during the wet season. Efforts would be made by the District to conduct the majority of land-disturbance work outside of the typical wet season period and to minimize the potential for large rain events to mobilize loose sediment during construction. In addition, coverage under the general construction permit typically covers dewatering activities.

Potential other water quality impacts, such as those that can result from wetland dredge and fill, would not occur as part of the Cañada College campus improvements because no surface waters exist onsite. Therefore, the Cañada College improvements would not otherwise substantially degrade water quality.

Construction activities could result in short-term surface and groundwater quality impacts, such as input of sediment loads that exceed water quality objectives or chemical spills into storm drains or groundwater aquifers if proper minimization measures are not implemented. However, the District will develop and implement a SWPPP specific to Cañada College Project improvements in compliance with the construction general permit. In addition, as described in Section 2.7 in Chapter 2, *Project Description*, the District would implement Environmental Commitments EC-HYD-1 to minimize the mobilization of sediment to storm drains and adjacent water bodies; EC-HAZ-1 to minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities; and EC-HAZ-2 to protect people from residual soil contamination. These three environmental commitments are restated as Mitigation Measures CC-HYD-1, CC-HAZ-1, and CC-HAZ-2. The District also requires construction contractors to implement

BMPs described in the District SWMP. BMPs are continually monitored, evaluated and emphasized during construction. All measures would be aligned with city and county general plan goals and policies related to water quality, as described above in Section 3.8.1.3. With implementation of **Mitigation Measures CC-HYD-1, CC-HAZ-1,** and **CC-HAZ 2**, and with compliance with the general construction permit and required measures in the District SWMP, potential water quality impacts from construction activities would be less than significant.

Mitigation Measure CC-HYD-1: Implement erosion-control measures to protect water quality during construction at Cañada College

The District will ensure the Project's construction specifications include the storm water pollution prevention plan (SWPPP) to minimize the mobilization of sediment to storm drains and adjacent water bodies. The SWPPP will include the following erosion- and sediment-control measures, based on standard industry measures and standard dust-reduction measures.

- Cover or apply nontoxic soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more) that could contribute sediment to waterways.
- Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways.
- Contain soil and filter runoff from disturbed areas by berms, vegetated filters, silt fencing, straw wattle, plastic sheeting, catch basins, or other means necessary to prevent the escape of sediment from the disturbed area.
- Prohibit the placement of earth or organic material where it may be directly carried into a stream, marsh, slough, lagoon, or body of standing water.
- Prohibit the following types of materials from being rinsed or washed into streets, shoulder areas, or gutters: concrete, solvents and adhesives, fuels, dirt, gasoline, asphalt, and concrete saw slurry.
- Conduct dewatering activities according to the provisions of the SWPPP.
- Prohibit placement of dewatered materials in local water bodies or in storm drains leading to such bodies without implementation of proper construction water quality control measures.

Mitigation Measure CC-HAZ-1. Prepare and implement a spill prevention, control, and countermeasure program for construction activities at Cañada College

This measure is described under Impact CC-HAZ-1 in Section 3.7, *Hazards and Hazardous Materials*.

Mitigation Measure CC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Cañada College

This measure is described under Impact CC-HAZ-2 in Section 3.7, *Hazards and Hazardous Materials*.

Operation

Operation of new campus facilities could increase existing and introduce new pollutants to storm drains. Operation and maintenance (O&M) activities of campus improvements would be similar to existing O&M activities, such as landscape maintenance, building cleaning and maintenance, storage of materials and substances, and vehicle use, with the exception of maintenance of potential new renewable energy installations, such as solar arrays. Good housekeeping practices, such as regular litter and trash pickup, sweeping, and secondary storage containment for hazardous materials would continue to be implemented on campus.

Of the 124 acres at Cañada College, approximately 4.9 acres would be new impervious area due to new buildings and expansion of parking lots as part of the Cañada College project improvements (**Table 3.8-8**). The increase in impervious surface over existing conditions would result in increased rates and quantities of stormwater runoff. Runoff from the new impervious surfaces could contain nonpoint pollution sources typical of urban settings and associated with automobiles, trash, cleaning solutions, and landscaped areas. Areas with campus improvements would be drained by a combination of new and existing onsite storm drain systems. All flows from the campus would continue to be conveyed to storm drain systems that discharge to the Redwood Creek subwatershed, which ultimately discharges to the San Francisco Bay.

Table 3.8-8. Total New Impervious Area as a Result of Cañada College Project Improvements

Proposed Facility	Area of New Impervious Surface (acres)
Parking lots	3.8
Building 1, Kinesiology/Wellness	0.5
Math/Science/Engineering (Building 23)	0.4
North Quad Development	0.2
Total	**4.9**

Source: San Mateo County Community College District 2015.

Typically, a project with greater than 5,000 square feet (approximately 0.11 acre) of new or replaced impervious area would need to comply with the San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) Provision C.3 requirements (as a permittee of the San Francisco Bay Municipal Regional Permit). However, the District is exempt from having to obtain a MS4 Permit. The District's existing SWMP includes postconstruction measures that help reduce long-term impacts on stormwater quality and receiving waters. All new construction will be targeted for LEED Gold, and will meet LEED credit requirements, which are comparable to SMCWPPP C.3 code requirements, as described in Chapter 2, *Project Description*, Section 2.4.6.5. As stated in Section 3.8.1.3, the District maintains its SWMP with the aid of the District's Stormwater Working Group that works specifically to address the stormwater quality and drainage needs of the campus. The existing SWMP for post construction measures on campus will be updated as part of Cañada College Project improvements. Because the actual postconstruction measures are not yet known, the District will implement hydromodification features as postconstruction measures (**Mitigation Measure CC-HYD-2**).

In addition to postconstruction measures, the campus would continue to have a large landscaped area, which would help reduce the amount of runoff leaving the Project sites, and thus reduce the volume of potential contaminated runoff. District landscape maintenance practices specified in the 2013–2016 Cañada College Sustainability Plan involve integrated pest management techniques, including minimizing the use of chemicals and ensuring that the least toxic chemical pesticides are used.

Groundwater levels are unknown for the Cañada College campus. Therefore, construction dewatering could be required during excavation for utility improvements and other excavation activities. Coverage under the general construction permit typically covers dewatering activities and are defined as authorized non-stormwater discharges provided that dischargers prove the quality of water to be sufficient and not impact beneficial uses. If dewatering activities require discharges to the storm drain system or other water bodies, the water would be treated as necessary prior to discharge so that all applicable water quality objectives are met. As a performance standard, these measures would be selected to achieve the maximum removal contaminant found in the groundwater and would represent the best available technology that is economically achievable. Implemented measures may include the retention of dewatering effluent until particulate matter has settled before it is discharged and the use of infiltration areas. The District or its contractor would perform routine inspections of the construction area to verify that the water quality control measures are properly implemented and maintained, conduct visual observations of the water (i.e., check for odors, discoloration, or an oily sheen on groundwater) and any other sampling and reporting activities prior to discharge required by the San Francisco Bay Water Board, if necessary. The final selection of water quality control measures would be subject to review by the San Francisco Bay Water Board. If the groundwater is found to not meet water quality standards and treatment measures are not effective, the water may need to be hauled offsite for treatment and disposal at an appropriate waste treatment facility.

With implementation of **Mitigation Measure CC-HYD-2**, the District's updated SWMP for Cañada College and requirements in the general construction permit, good housekeeping practices, and non-toxic landscape practices, potential water quality impacts from operation of the proposed campus improvements would be less than significant.

Mitigation Measure CC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Cañada College

The District will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit stormwater runoff and provide for onsite treatment of contaminants. These facility improvement areas will be open, level areas vegetated to allow runoff to be distributed evenly across the area. They will be designed to treat runoff by filtering raw runoff through the soil media in the treatment area to trap particulate pollutants (suspended solids and trace metals) and promote infiltration. Project areas will be designed to treat runoff so that pollutants (e.g., sediment, landscape fertilizers and/or pesticides, oil from parking areas) can be filtered out and, therefore, the Project will not contribute a substantial number of additional pollutants to runoff.

Maintenance of these features will be performed routinely to prevent sediment buildup and clogging in order to ensure optimal pollutant removal efficiency. Maintenance activities will include those listed below and would be done periodically.

- Remove obstructions, debris and trash and dispose of properly.
- Inspect to ensure proper drainage between storms and within 5 days following rainfall.
- Inspect inlets for channels, soil exposure, or other evidence of erosion.
- Remove obstructions and sediment.
- Maintain vegetation via pruning and weeding, and treat with preventative and low-toxic methods.

- Check that mulch is maintained at an appropriate depth and replenish as necessary.
- Use soil that meets specifications included in the SMCWPPP C.3 Stormwater Technical Guidance Manual, or comparable document. Specifically, soils must percolate at a rate of 5 to 10 inches per hour.

A facility improvement area inspection and maintenance checklist will be used to conduct inspections, identify needed maintenance, and record maintenance that is conducted. Operation of the hydromodification features is expected to improve the quality of stormwater from the Project site. Maintenance of these areas would help eliminate or minimize impacts on stormwater quality.

Impact CC-HYD-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (less than significant with mitigation)

Construction

If shallow groundwater exists, dewatering for excavation activities would likely take place. However, the dewatering would be on a one-time or temporary basis during the construction phase and would not result in a loss of quantities of water that would deplete groundwater supplies. In addition, water supply for construction activities (e.g., dust control, concrete mixing and material washing) would come from nearby hydrants, existing surface supplies to the site, and/or trucked to the site. Therefore, impacts on groundwater supplies from construction activities would be less than significant. No mitigation is required.

Operation

Although the area of new impervious surfaces on the Cañada College campus would increase, landscaped and hydromodification features would continue to allow for groundwater infiltration. Decreases in pervious area would be offset by the use of improved ground cover or vegetation with greater infiltration capacities throughout the campus that would promote groundwater infiltration. For example, native grasses would expose native soils and new vegetation zones would slow water down, allowing it to percolate into the ground, and thus provide increased benefits for groundwater recharge. In addition, water supply for the new facility improvements would come from City of Redwood City, which primarily uses surface water supplies. Therefore, groundwater would not be affected as part of operation of the facility improvements.

With implementation of **Mitigation Measure CC-HYD-2** and incorporation of landscaped areas in the design, potential impacts on groundwater recharge would be reduced, and groundwater within the San Mateo Subbasin would not be used for operation of Cañada College facility improvements. Therefore, impacts on groundwater supplies and recharge during operation of the Cañada College project improvements would be less than significant.

Mitigation Measure CC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Cañada College

This measure is described under Impact CC-HYD-1.

Impact CC-HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite (less than significant with mitigation)

Construction

Project construction activities would alter existing drainage patterns and could result in local (onsite) and temporary erosion and siltation. As described in Section 2.7 of Chapter 2, *Project Description*, the District would implement Environmental Commitment EC-HYD-1, restated as **Mitigation Measure CC-HYD-1** to minimize the mobilization of sediment to storm drains and adjacent water bodies. The District would update and implement the Cañada College SWMP to minimize erosion and sedimentation into nearby storm drains during construction. Additionally, construction of the Cañada College project improvements would not involve work within surface waters, and thus would not alter the course of an existing stream or river because these features do not exist onsite.

Implementation of the District SWMP and **Mitigation Measure CC-HYD-1** would reduce the potential for substantial erosion or siltation onsite or offsite, or flooding onsite or offsite as a result of altering existing drainage patterns, or substantially increase the rate or amount of runoff that would result in substantial erosion, siltation, or flooding onsite or offsite. The impact would be less than significant.

Mitigation Measure CC-HYD-1: Implement erosion-control measures to protect water quality during construction at Cañada College

This measure is described under Impact CC-HYD-1.

Operation

Operation of the Project would require soil stabilization (e.g., vegetation, other protective cover, and stabilized slopes and fills) in accordance with the District SWMP, which would reduce erosion and sediment transport in exposed areas.

The Project site is not within a FEMA-designated special flood hazard area for a 100-year flood. Following Project implementation, there would be additional landscaped areas and drainage improvements, which would ultimately reduce the potential for moderate localized flooding and ponding in areas throughout the campus. Additional hydromodification features would further reduce the potential for flood risks. In addition, the Project would not contribute to flood risks associated with projected sea level rise since it is outside of an area vulnerable to sea level rise. In addition, there are no aspects of the Project that would physically or directly alter water surface elevations in Redwood Creek, Arroyo Ojo del Agua, or San Francisco Bay or where sea level rise-induced flooding is projected to take place.

Implementation of the District SWMP and **Mitigation Measure CC-HYD-2** would reduce the potential for substantial erosion or siltation onsite or offsite, or flooding onsite or offsite as a result altering existing drainage patterns, or substantially increase the rate or amount of runoff that would result in substantial erosion, siltation, or flooding onsite or offsite. The impact would be less than significant.

Mitigation Measure CC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Cañada College

This measure is described under Impact CC-HYD-1.

Impact CC-HYD-4: Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff (less than significant with mitigation)

New and renovated Cañada College facilities would be drained by a combination of existing and new onsite storm drain inlets and pipes to the City of Redwood City's storm system. The existing storm drain system and associated capacity have been well characterized by the District and new stormwater pipes will be designed to have sufficient capacity to carry additional flows. As described under Impact CC-HYD-1, a portion of the surface runoff from the new facilities would be directed to new landscaped area and hydromodification features located throughout the campus. Thus, with implementation of **Mitigation Measure CC-HYD-2**, runoff water from the Project site would not exceed the capacity of existing or planned stormwater drainage systems, and this impact would be less-than-significant.

Mitigation Measure CC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Cañada College

This measure is described under Impact CC-HYD-1.

Impact CC-HYD-5: Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place within a 100-year flood hazard area structures that would impede or redirect flood flows (less than significant with mitigation)

The Cañada College campus is located on a hilltop at approximately 666 feet above msl and is not located within a FEMA-designated 100-year flood zone, as shown in **Figure 3.8-2a**. Therefore, no housing or structures would be placed within a 100-year flood hazard area. However, the new buildings (Building 23, Math/Science/Engineering Building, and Building 1, Kinesiology/Wellness) or other structures could impede or redirect localized flood flows. The remaining building construction would be renovation of existing buildings, which could include interior and exterior improvements, but the overall building structures and size would not change. Therefore, there would be no associated changes to the ability for the existing buildings to impede surface flows would occur. Other improvements include parking lot expansion and potential renewable energy installations, all of which are at or near grade surface elevations and would not impede or redirect flood flows.

With the hilly topography, proposed drainage improvements and additional landscaped areas, and new hydromodification features, any potential for overland flood flows would be minimized. With implementation of **Mitigation Measure CC-HYD-2**, this impact would be less than significant.

Mitigation Measure CC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Cañada College

This measure is described under Impact CC-HYD-1.

Impact CC-HYD-6: Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam (no impact)

There are no major reservoirs or levees located upstream of the Cañada College campus. Therefore, there would be no exposure of people or structures to flood impacts as a result of dam or levee failure. There would be no impact.

Impact CC-HYD-7: Contribute to inundation by seiche, tsunami, or mudflow (less than significant)

The Project site is not located near an enclosed body of water capable of producing seiche waves and is too far inland to be at risk for tsunami hazards. San Francisco Bay is located approximately 6 miles to the east, and the Pacific Ocean is located approximately 10 miles to the west. As described in Section 3.5, *Geology, Soils, and Paleontology*, the Cañada College campus has not been mapped by the State of California under the Seismic Hazards Mapping Act. In addition, a review of existing U.S. Geological Survey (USGS) maps did not reveal any recent landslide activity in the vicinity of proposed improvements. Thus, the risk of slope failure—including seismically induced landsliding and/or mudslides—at the Project site is judged to be low. Therefore, this impact is less than significant. No mitigation is required.

College of San Mateo

Impact CSM-HYD-1: Violate any water quality standards or waste discharge requirements and/or otherwise substantially degrade water quality (less than significant with mitigation)

Construction and operation of the facility improvements at CSM would result in similar impacts on water quality as described under Impact CC-HYD-1 for the facility improvements at Cañada College due to the similar types of proposed facilities and land uses.

Project construction at CSM is expected to take approximately 8 years (from summer 2016 through fall 2024) and, therefore, some activities would occur during the wet season, which can mobilize loose sediment during construction and degrade water quality. Refer to the discussion under Impact CC-HYD-1 for additional information on construction impacts.

Of the 150 acres at CSM, approximately 0.3 acre would be new impervious area due to new building construction as part of the Project improvements at CSM (**Table 3.8-9**).

Table 3.8-9. Total New Impervious Area as a Result of College of San Mateo Project Improvements

Proposed Facility	Area of New Impervious Surface (acre)
Building 8, Gymnasium	0.1
Building 19, Center for Innovation and Emerging Technologies	0.2
Total	**0.3**

Source: San Mateo County Community College District 2015.

As stated in Section 3.8.1.3, the District maintains its SWMP with the aid of the District's Stormwater Working Group and the College of San Mateo Sustainability Plan (June 2013). Together, these work specifically to address the stormwater quality and drainage needs of the campus. The existing SWMP for postconstruction measures on campus would be updated as part of the CSM Project improvements.

As with Cañada College Project improvements, the actual postconstruction measures are not yet known; therefore, hydromodification features are required as postconstruction measures. Refer to the discussion under Impact CC-HYD-1 for additional information on operation impacts.

Similar to Cañada College, groundwater levels are unknown for the CSM campus. However, because the campus is situated on a hilltop at approximately 662 feet above msl, which is at an elevation much higher than typical groundwater levels, it is unlikely that shallow groundwater will be encountered. Therefore, in the event that shallow groundwater exists and that construction dewatering to storm drains occurs, it would be properly treated prior to discharge and would be according to the San Francisco Bay Water Board dewatering requirements.

With implementation of **Mitigation Measures CSM-HYD-1, CSM-HAZ-1,** and **CSM-HAZ-2**, and with compliance with the general construction permit and required measures in the District SWMP, potential water quality impacts from construction activities would be less than significant. With implementation of the District's updated SWMP for CSM, **Mitigation Measure CSM-HYD-2**, good housekeeping practices, and non-toxic landscape practices, potential water quality impacts from operation would be less than significant.

Mitigation Measure CSM-HYD-1: Implement erosion-control measures to protect water quality during construction at the College of San Mateo

This measure is the same as Mitigation Measure CC-HYD-1 described under Impact CC-HYD-1 but would be implemented at the College of San Mateo.

Mitigation Measure CSM-HAZ-1: Prepare and implement a spill prevention, control, and countermeasure program for construction activities at the College of San Mateo

This measure is described under Impact CSM-HAZ-1 in Section 3.7, *Hazards and Hazardous Materials*.

Mitigation Measure CSM-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at the College of San Mateo

This measure is described under Impact CSM-HAZ-2 in Section 3.7, *Hazards and Hazardous Materials*.

Mitigation Measure CSM-HYD-2: Design and maintain hydromodification features as postconstruction measures at the College of San Mateo

This measure is the same as Mitigation Measure CC-HYD-2 described under Impact CC-HYD-1 but would be implemented at the College of San Mateo.

Impact CSM-HYD-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (less than significant with mitigation)

Construction and operation of the CSM project improvements would result in similar impacts on groundwater supply as those of Cañada College, as described for Impact CC-HYD-2 due to the similar water supply needs during construction and operation of proposed facilities. Construction-related impacts on groundwater would be less than significant.

Groundwater recharge and supply would not be affected during operation of the facility improvements. Although the area of new impervious surfaces on the CSM campus would increase, landscaped and hydromodification features would continue to allow for groundwater infiltration. Implementing hydromodification features as postconstruction measures would offset decreases in pervious area through use of improved ground cover or vegetation with greater infiltration capacities throughout the campus, promoting groundwater infiltration. Water supply for the new facility improvements would come from California Water Service Co., which primarily uses surface water supplies. Groundwater within the San Mateo Subbasin would not be used for construction or operation of CSM facility improvements. With implementation of **Mitigation Measure CSM-HYD-2**, the impact would be less than significant.

Mitigation Measure CSM-HYD-2: Design and maintain hydromodification features as postconstruction measures at the College of San Mateo

This measure is the same as Mitigation Measure CC-HYD-2 described under Impact CC-HYD-1 but would be implemented at the College of San Mateo.

Impact CSM-HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite (less than significant with mitigation)

Construction and operation of the CSM improvements would result in similar impacts on drainage patterns as those of Cañada College, as described for Impact CC-HYD-3, due to the similar existing topography and surface water conditions within the Project vicinity. Similar to Cañada College, topography surrounding CSM is relatively hilly, and no surface waters are found onsite. In addition, CSM is not within a FEMA-designated special flood hazard area for a 100-year flood, so construction would not obstruct the flow of water within a floodplain.

Implementation of the District's SWMP, erosion control measures during construction, and hydromodification features during operation would reduce the potential for substantial erosion or siltation onsite or offsite, for flooding onsite or offsite as a result altering existing drainage patterns, or a substantial increase in the rate or amount of runoff that would result in substantial erosion, siltation or flooding onsite or offsite. With implementation of **Mitigation Measures CSM-HYD-1** and **CSM-HYD-2**, the impact would be less than significant.

Mitigation Measure CSM-HYD-1: Implement erosion-control measures to protect water quality during construction at the College of San Mateo

This measure is the same as Mitigation Measure CC-HYD-1 described under Impact CC-HYD-1 but would be implemented at the College of San Mateo.

Mitigation Measure CSM-HYD-2: Design and maintain hydromodification features as postconstruction measures at the College of San Mateo

This measure is the same as Mitigation Measure CC-HYD-2 described under Impact CC-HYD-1 but would be implemented at the College of San Mateo.

Impact CSM-HYD-4: Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff (less than significant with mitigation)

Construction and operation of the CSM improvements would result in similar impacts on storm drain capacity as those of Cañada College, as described for Impact CC-HYD-4, due to the similar drainage systems and type of utility improvements. New and renovated CSM facilities would be drained by a combination of existing and new onsite storm drain inlets and pipes to the City of San Mateo's storm system and the San Mateo Creek subwatershed. Impacts on the storm drain system would be reduced by directing a portion of the surface runoff from the new facilities to new landscaped area and hydromodification features located throughout the campus. Thus, the runoff water from the Project site would not exceed the capacity of existing or planned stormwater drainage systems. With implementation of **Mitigation Measure CSM-HYD-2,** proper design of new and relocated storm drain inlets and pipes, drainage improvements, and minimal sources of new polluted runoff, this impact would be less-than significant.

Mitigation Measure CSM-HYD-2: Design and maintain hydromodification features as postconstruction measures at the College of San Mateo

This mitigation is the same as Mitigation Measure CC-HYD-2 described under Impact CC-HYD-1 but would be implemented at the College of San Mateo.

Impact CSM-HYD-5: Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place within a 100-year flood hazard area structures that would impede or redirect flood flows (less than significant with mitigation)

Construction and operation of the CSM improvements would result in similar flooding impacts as those of Cañada College, as described for Impact CC-HYD-5, due to the similar flooding conditions and type of facility improvements. The CSM campus is located on a hilltop at approximately 662 feet above msl and is not located within a FEMA-designated 100-year flood zone, as shown in **Figure 3.8-2b**. Therefore, no housing or structures would be placed within a 100-year flood hazard area. However, the new Building 8, Gymnasium, and Building 19, Center for Innovation and Emerging Technologies, would be constructed as part of the CSM facility improvements could impede or redirect localized flood flows. Due to the hilly topography, and with drainage improvements and incorporation of landscaped and hydromodification features, any potential for overland flood flows would be minimized. With implementation of **Mitigation Measure CSM-HYD-2**, this impact would be less than significant.

Mitigation Measure CSM-HYD-2: Design and maintain hydromodification features as postconstruction measures at the College of San Mateo

This mitigation is the same as Mitigation Measure CC-HYD-2 described under Impact CC-HYD-1 but would be implemented at the College of San Mateo.

Impact CSM-HYD-6: Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam (no impact)

There are no levees located upstream of CSM and, therefore, it is not subject to the risks of levee failure. Although the Lower Crystal Springs Reservoir is located approximately 1.5 miles west of

CSM, the campus is approximately 300 feet higher in elevation than the reservoir and is on a ridge that is well separated from any possible discharge from the dam. Therefore, CSM is not located within the dam failure inundation area of the Lower Crystal Springs Reservoir. There would be no impact.

Impact CSM-HYD-7: Contribute to inundation by seiche, tsunami, or mudflow (less than significant)

The campus is not located near an enclosed body of water (approximately 5.3 miles from the San Francisco Bay and 1.5 miles from the Crystal Springs Reservoir) capable of producing seiche waves. It is also too far inland from the Pacific Ocean (approximately 7.4 miles) to be at risk for tsunami hazards. As described in Section 3.5, *Geology, Soils, and Paleontology*, the CSM campus has not been mapped by the State of California under the Seismic Hazards Mapping Act. In addition, a review of existing USGS maps did not reveal any recent landslide activity in the vicinity of proposed improvements. Thus, the risk of slope failure—including seismically induced landsliding and/or mudslides—at the campus would be low. This impact is less than significant. No mitigation is required.

Skyline College

Impact SC-HYD-1: Violate any water quality standards or waste discharge requirements and/or otherwise substantially degrade water quality (less than significant with mitigation)

Construction and operation of the facility improvements at Skyline College would result in similar impacts on water quality as described under Impact CC-HYD-1 for the facility improvements at Cañada College, due to the similar types of proposed facilities and land uses.

Project construction at Skyline College is expected to take approximately 10 years (from fall 2016 through spring 2027) and, therefore, some activities would occur during the wet season, which can mobilize loose sediment during construction and degrade water quality. Refer to the discussion under Impact CC-HYD-1 for additional information on construction impacts.

Of the 108 acres at Skyline College, approximately 4.5 acres would be new impervious area due to new building construction; pavement for new parking lots as part of the Skyline College Project improvements and the proposed residential development (**Table 3.8-10**). New building development includes construction of a residential complex with up to 71 housing units on an existing undeveloped approximately 8-acre parcel (Surplus Parcel B), located near the main campus entrance, south of College Drive and east of College Road and Lot A. The new residential complex could include up to 24 units of multi-family housing for college faculty/staff and up to 47 single-family detached homes available to the general public. This public housing component is subject to the City of San Bruno's Municipal Code. As described in Section 3.8.1.3, City of San Bruno municipal codes and ordinances related to hydrology and water quality involve stormwater management and erosion control measures, such as BMPs implemented for new development and redevelopment projects, and an erosion control plan is required to obtain a grading permit.

Table 3.8-10. Total New Impervious Area as a Result of Skyline College Project Improvements

Proposed Facility	Area of New Impervious Surface (acres)
Building 1, Social Science/Creative Arts Programs	0.0
Building 12, Environmental Sciences	0.1
Building 15, Career and Sustainable Technology	0.0
Demolition of Pacific Heights and new parking area	0.0[a]
Residential development	4.4
Total	**4.5**

Source: San Mateo County Community College 2015.

Note: These calculations take in the roof areas of new/expanded buildings, adjacent sidewalks and parking/roadways at the new housing. It is not possible to breakout precise numbers for housing, sidewalks, parking/roadways at this time because a site plan has not been developed yet.

[a] Pacific Heights is currently impervious area, and no new impervious area would result from construction of the new parking area.

As stated in Section 3.8.1.3, the District maintains its SWMP with the aid of the District's Stormwater Working Group and the Skyline College Sustainability Plan (June 2013). Together, these work specifically to address the stormwater quality and drainage needs of the campus. The existing SWMP for postconstruction measures on campus will be updated as part of the Skyline College project improvements. As with Cañada College project improvements, the actual postconstruction measures are not yet known; therefore, hydromodification features are required as postconstruction measures. Refer to the discussion under Impact CC-HYD-1 for additional information on operation impacts.

Due to relatively shallow groundwater levels on the Skyline College campus (approximate depth of 5.0 feet bgs) (AST 2015), groundwater dewatering for utility improvements and other excavation activities is likely to take place. If dewatering activities require discharges to the storm drain system or other water bodies, the water shall be treated as necessary prior to discharge so that all applicable water quality objectives are met, as required by the San Francisco Bay Water Board. The San Francisco Bay Water Board would need to be notified if dewatering to surface waters would occur, and the contractor may be subject to dewatering requirements, such as monitoring and reporting, in addition to what is outlined in the construction general permit, including discharge sampling and reporting.

With implementation of **Mitigation Measures SC-HYD-1, SC-HAZ-1,** and **SC-HAZ-2** and with compliance with the general construction permit and required measures in the District SWMP, potential water quality impacts from construction activities would be less than significant. With implementation of the District's updated SWMP for Skyline College, **Mitigation Measure SC-HYD-2**, good housekeeping practices, and non-toxic landscape practices, potential water quality impacts from operation would be less than significant.

Mitigation Measure SC-HYD-1: Implement erosion-control measures to protect water quality during construction at Skyline College

This measure is the same as Mitigation Measure CC-HYD-1 described under Impact CC-HYD-1 but would be implemented at Skyline College.

Mitigation Measure SC-HAZ-1: Prepare and implement a spill prevention, control, and countermeasure program for construction activities at Skyline College

This measure is described under Impact SC-HAZ-1 in Section 3.7, *Hazards and Hazardous Materials*.

Mitigation Measure SC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Skyline College

This measure is described under Impact SC-HAZ-2 in Section 3.7, *Hazards and Hazardous Materials*.

Mitigation Measure SC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Skyline College

This mitigation is the same as Mitigation Measure CC-HYD-2 described under Impact CC-HYD-1 but would be implemented at Skyline College.

Impact SC-HYD-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (less than significant with mitigation)

Construction and operation of the Skyline College Project improvements would result in similar impacts on groundwater supply as those of Cañada College, as described for Impact CC-HYD-2, due to the similar water supply needs during construction and operation of proposed facilities. Construction-related impacts on groundwater would be less than significant.

Groundwater recharge and supply would not be affected during operation of the facility improvements. Although the area of new impervious surfaces on the Skyline College campus would increase, landscaped and hydromodification features would continue to allow for groundwater infiltration. Implementing hydromodification features as postconstruction measures would offset decreases in pervious area through use of improved ground cover or vegetation with greater infiltration capacities throughout the campus, promoting groundwater infiltration. Water supply for the new facility improvements would come from City of San Bruno, which primarily uses surface water supplies over groundwater. With implementation of **Mitigation Measure SC-HYD-2**, impacts would be less than significant.

Mitigation Measure SC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Skyline College

This mitigation is the same as Mitigation Measure CC-HYD-2 described under Impact CC-HYD-1 but would be implemented at Skyline College.

Impact SC-HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite (less than significant with mitigation)

Construction and operation of the Skyline College improvements would result in similar impacts on drainage patterns as those of Cañada College, as described for Impact CC-HYD-3, due to the similar existing topography and surface water conditions within the Project vicinity. Similar to Cañada College, topography surrounding Skyline College is relatively hilly, and no surface waters are found onsite. In addition, Skyline College is not within a FEMA-designated special flood hazard area for a 100-year flood, so construction would not obstruct the flow of water within a floodplain.

Implementation of the District SWMP, erosion control measures during construction, and hydromodification features during operation, would reduce the potential for substantial erosion or siltation onsite or offsite, or in flooding onsite or offsite as a result altering existing drainage patterns or substantially increase the rate or amount of runoff that would result in substantial erosion, siltation or flooding onsite or offsite. With implementation of **Mitigation Measures SC-HYD-1** and **SC-HYD-2**, the impact would be less than significant.

Mitigation Measure SC-HYD-1: Implement erosion-control measures to protect water quality during construction at Skyline College

This measure is the same as Mitigation Measure CC-HYD-1 described under Impact CC-HYD-1 but would be implemented at Skyline College.

Mitigation Measure SC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Skyline College

This measure is the same as Mitigation Measure CC-HYD-2 described under Impact CC-HYD-1 but would be implemented at Skyline College.

Impact CC-HYD-4: Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff (less than significant with mitigation)

Construction and operation of the Skyline College improvements would result in similar impacts on storm drain capacity as those of Cañada College, as described for Impact CC-HYD-4, due to the similar drainage systems, and type of utility improvements. New and renovated Skyline College facilities would be drained by a combination of existing and new onsite storm drain inlets and pipes to the City of San Bruno's storm system and San Bruno Creek subwatershed. Impacts on the storm drain system would be reduced by directing a portion of the surface runoff from the new facilities to new landscaped area and hydromodification features located throughout the campus. Thus the runoff water from the Project site would not exceed the capacity of existing or planned stormwater drainage systems. With implementation of **Mitigation Measure SC-HYD-2,** minimal sources of new polluted runoff, proper design of new and relocated storm drain inlets and pipes, and other drainage improvements, this impact would be less than significant.

Mitigation Measure SC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Skyline College

This measure is the same as Mitigation Measure CC-HYD-2 described under Impact CC-HYD-1 but would be implemented at Skyline College.

Impact SC-HYD-5: Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place within a 100-year flood hazard area structures that would impede or redirect flood flows (less than significant with mitigation)

Construction and operation of the Skyline College improvements would result in similar flooding impacts as those described for Cañada College under Impact CC-HYD-5 due to the similar flooding conditions and type of facility improvements. The Skyline College campus is located on a hilltop at approximately 660 feet above msl, sloping eastward, and is not located within a FEMA-designated 100-year flood zone, as shown in **Figure 3.8-2c**. Therefore, no housing or structures would be placed within a 100-year flood hazard area. Due to the hilly topography and with drainage improvements and incorporation of landscaped and hydromodification features, any potential for overland flood flows would be minimized. With implementation of **Mitigation Measure SC-HYD-2**, this impact would be less than significant.

Mitigation Measure SC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Skyline College

This measure is the same as Mitigation Measure CC-HYD-2 described under Impact CC-HYD-1 but would be implemented at Skyline College.

Impact SC-HYD-6: Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam (no impact)

There are no levees located upstream of the Skyline College campus and, therefore, it is not subject to the risks of levee failure. Although the Skyline College campus is located approximately 2.0 miles from the San Andreas Reservoir, it is not located within its dam failure inundation area (Association of Bay Area Governments 2015). Therefore, there would be no exposure of people or structures to flood impacts as a result of dam or levee failure. There would be no impact.

Impact SC-HYD-7: Contribute to inundation by seiche, tsunami, or mudflow (less than significant)

The Skyline College campus is approximately 4.7 miles from the San Francisco Bay and 2.0 miles from the San Andreas Reservoir and, thus, is not located near an enclosed body of water capable of producing seiche waves. The campus is also too far inland from the Pacific Ocean (approximately 1.5 miles) to be at risk for tsunami hazards. As described in Section 3.5, *Geology, Soils, and Paleontology*, the Skyline College campus has not been mapped by the State of California under the Seismic Hazards Mapping Act. In addition, a review of existing USGS maps did not reveal any recent landslide activity in the vicinity of proposed improvements. Thus, the risk of slope failure—including seismically induced landsliding and/or mudslides—at the campus would be low. Therefore, this impact is less than significant. No mitigation is required.

3.8.3.4 Cumulative Impacts

This cumulative analysis uses the plan/projections approach to examine the effects of the Project in combination with other current projects, probable future projects, and projected future growth within the applicable geographic context in the next 20 years. The general plans of the cities of San Bruno, San Mateo, Redwood City, and the Town of Woodside were used as analogues of future development. As discussed in the setting section, stormwater drainage can result in cumulative effects on water quality within the affected basin. One manifestation of this is the Section 303(c) impaired water bodies classification. FEMA's flood hazard maps provide another measure of a cumulative impact—the potential for flooding.

Water Quality

Development within the vicinity of the each college campus could degrade stormwater quality during construction through land disturbance and during operation through an increase in impervious surface area and increase in contaminated runoff, which could affect the beneficial uses for surface waters within the Project vicinity. At Cañada College this includes Redwood Creek, Arroyo Ojo de Agua, and ultimately South San Francisco Bay (**Table 3.8-1**) and water quality impairments include 303(d) listings in South San Francisco Bay (**Table 3.8-3**). At CSM, this includes San Mateo Creek (**Table 3.8-4**), and water quality impairments include 303(d) listings in Laurel Creek for diazinon and the Lower San Mateo Creek for sediment toxicity (**Table 3.8-5**). At Skyline College, this includes the San Bruno/Colma Creek (**Table 3.8-6),** and water quality impairments include 303(d) listings in Colma Creek for trash (**Table 3.8-7**).

Water quality objectives for surface waters in the Project area that may be affected include bacteria, dissolved oxygen, oil and grease, sediment, suspended material and temperature. During construction, runoff may contain sediments and other construction materials and wastes (e.g., concrete debris) resulting from activities, such as site clearing and grubbing, demolition and removal of existing structures and pavement, cut-and-fill activities, grading and excavation, paving, building construction, tree removal, and landscaping. During operation, runoff can contain grease, oil, and metals accumulated in streets and driveways, as well as sediment and other particulates, animal waste, pesticides, herbicides, fertilizer, and trash. Cumulative development could affect water quality if the intensity of land use changes, and/or drainage is altered such that the introduction of pollutants to surface water or groundwater is facilitated. Land use changes would potentially alter the type and concentration of pollutants in stormwater runoff, and increased intensity of land use would potentially increase pollutant concentrations.

When the effects of the Project on water quality are considered in combination with the potential effects of other projects, there would be the potential for cumulative impacts on surface and groundwater quality. The incremental water quality impact contribution from implementation of the Project would be minor. The combined effects on water quality from the Project and other projects could result in a cumulatively significant impact. However, new projects are subject to the requirements of the SMCWPPP, the associated San Francisco Bay MS4 Permit, the construction general permit, and city municipal codes as they relate to water quality; these regulatory requirements have been designed to protect water quality. Under the campus sustainability plans, future development would not increase runoff, and trash is collected regularly. Additionally, development projects would be subject to an environmental review process, which would identify potential site- and/or project-specific water quality impacts and mitigate for any potential significant impacts. Therefore, there would be a less-than-considerable contribution to cumulative impacts on water quality as a result of Project implementation.

Groundwater

Most cumulative projects would occur in urbanized areas where there is limited existing recharge due to impervious area. Cumulative development would not be expected to substantially increase the amount of impervious surfaces, so groundwater recharge potential from percolating rainfall would not be adversely affected, and indirect lowering of the local groundwater table is not likely to take place.

In addition, cumulative development could require increases in water supplies. Cañada College, which is located in the San Mateo Plain Groundwater Subbasin, currently obtains all water supplies from Redwood City, which relies upon the Hetch Hetchy regional water system (SFPUC) and does not rely on groundwater supplies. CSM is also located within the San Mateo Plain Subbasin and is supplied by SFPUC through the City of San Mateo. Skyline College is located within the Westside Groundwater Basin and receives water from the City of San Bruno, whose primary water supply is met by local water sources originating from five underground wells and water purchased from SFPUC. Current groundwater supplies would not be affected by development at Cañada College and CSM. However, Skyline College receives some groundwater supplies from the City of San Bruno and would receive groundwater supplies in the future to meet projected demands in San Bruno.

Implementation of the Project would result in a small increase in pervious surface area; therefore, the Project would, in the worst case scenario, minimally reduce groundwater recharge. However, this would be offset by installation of hydromodification features that would avoid net outflow of runoff from the site and allow water to infiltrate to the groundwater. As a result, groundwater recharge would not be adversely affected. The Project's contribution to cumulative groundwater recharge impacts would be less than considerable.

The Project would rely on surface water supplies, as is discussed in Section 3.12, *Public Services and Utilities* and, therefore, would not affect groundwater supplies during construction or operation. The Project's contribution to cumulative impacts on groundwater supplies could take place due to an increase in impervious area. Although the area of new impervious surfaces on each campus would increase, landscaped and hydromodification features would continue to allow for groundwater infiltration. As part of **Mitigation Measures CC-HYD-2**, **CSM-HYD-2,** and **SC-HYD-2**, decreases in pervious area would be offset by the use of improved ground cover or vegetation with greater infiltration capacities throughout the campus that would promote groundwater infiltration.

Therefore, impacts on groundwater supplies and recharge during operation of Project improvements would be less than cumulatively considerable.

Flooding

Cumulative development within the vicinity of each college campus could increase the volume and rate of stormwater runoff. Such increases could cause localized flooding if the storm drainage capacity is exceeded or if flows exceed channel capacities and are conveyed to overbank areas where flood storage may not be available. For the most part, the cumulative projects would occur in developed areas already with impervious surfaces, and these projects would not be expected to substantially increase the amount of impervious surfaces.

All cumulative projects would be required to include stormwater management features, such as LID measures, into project design plans to reduce flows to preproject conditions. If improvements to storm drainage capacity are needed, the District would be required to coordinate with local agencies

to ensure the appropriate conditions of approval for storm drainage improvements are identified. Following Project development, there would be a reduction in impervious surfaces relative to existing conditions and an increase in pervious surfaces. The overall effect of these changes would be a reduction in the total system stormwater runoff rate at the Project site. Therefore, the Project would not likely contribute to the cumulative exceedance of storm drainage capacity, and there would be a less-than-considerable contribution to the cumulative impact.

Cumulative development could increase the exposure of people and structures to flood risks. Projects that increase impervious area or result in development within low-lying areas (i.e., infill and/or near the Bay front), would be most at risk. However, the County of San Mateo and other local agencies are currently implementing requirements that will minimize increased impervious area and will promote methods for reducing flood risks with new development. These efforts will also help minimize the potential impacts of flooding from sea level rise and events associated with a combination of high tides and sea level rise. Therefore, the Project would not contribute to a cumulative exposure of people and structures to risks of flooding, and there would be a less-than-considerable contribution to this cumulative impact.

Implementation of the Project would not contribute to the potential for flooding or the exposure of people and structures to flood risks. Each campus is located on a hilltop and, therefore, is not located within a FEMA-designated 100-year flood zone. However, due to the hilly topography, drainage improvements, and incorporation of landscaped and hydromodification features (**Mitigation Measure CC-HYD-2**), any potential for overland flood flows would be minimized. Therefore, this would be a less-than-considerable contribution to the cumulative impact.

3.9 Land Use and Planning

This section describes the regulatory and environmental setting for land use and planning. It also describes impacts on land use and planning that would result from implementation of the Project and mitigation for significant impacts, where feasible and appropriate.

3.9.1 Regulatory Setting

3.9.1.1 Federal

There are no relevant federal regulations for land use and planning.

3.9.1.2 State

All cities and counties within California are required by the state to adopt a general plan establishing goals and policies for long-term development, protection from environmental hazards, and conservation of identified natural resources (California Government Code Section 65300, et seq.). Local general plans lay out the pattern of future residential, commercial, industrial, agricultural, open-space, and recreational land uses within a community. To facilitate implementation of planned growth patterns, general plans typically also include goals and policies addressing the coordination of land use patterns with the development and maintenance of infrastructure facilities and utilities. California Government Code Section 65302 lists seven "elements" or chapters that cities and counties must include in their general plans: Land Use, Circulation, Housing, Conservation, Open Space, Noise, and Safety.

Local jurisdictions implement their general plans by adopting zoning, subdivision, grading, and other ordinances. Zoning identifies the specific types of land uses that may be allowed on a given site and establishes the standards that would be imposed on new development. Zoning regulations vary from jurisdiction to jurisdiction. However, typical standards promulgated in zoning ordinances include the siting of structures relative to parcel boundaries; architectural design (including height limitations); and the percentage of building coverage allowed relative to the overall square footage of a parcel. In some jurisdictions, the zoning ordinance permits construction "by right" (i.e., without the need for hearing) as an allowable use. In others, a conditional use permit or similar discretionary action is needed.

3.9.1.3 Local

General plans guide the physical development and character of a city or town. General plans set forth city or town policies regarding the types and locations for future land uses and activities and are used by a city or town council and planning commission in considering planning and land use decisions.

Zoning ordinances implement the land uses designated and enforce the policies described in general plans. Zoning ordinances generally define the zoning districts that the city or town is divided into and identify the land uses permitted and conditionally permitted. Zoning ordinances also establish development regulations such as building height, land cover by buildings, and floor area restrictions.

California Government Code Section 53094 authorizes the board of trustees of a community college district, by two-thirds vote, to render city and county zoning ordinances inapplicable to the proposed use of certain property for educational purposes. As stated in Section 2.6 of Chapter 2, *Project Description*, the District is exempt from the application of city and county zoning ordinances, except the proposed residential complex at Skyline College because it is a non-educational use. However, the surrounding agencies' relevant zoning and General Plan provisions for each campus are disclosed in this EIR, and the Project's consistency with those requirements is discussed for informational purposes. The housing proposed at Skyline College would require an amendment to the City of San Bruno General Plan, rezoning of a portion of Surplus Parcel B, and approval of a subdivision map because it would be subject to San Bruno's zoning ordinance and possibly a planned development permit.

Cañada College

The Redwood City/Woodside boundary bisects the Cañada College campus. The majority of the campus is located within Woodside, but the northeast portion of the campus is in Redwood City.

Redwood City General Plan

The Redwood City General Plan projects city planning goals to the year 2030. The plan designates the Cañada College campus as Schools, which is a subset of the Public/Quasi-Public land use designation. This land use designation permits public and private educational facilities, including elementary schools, middle schools, high schools, community colleges, private colleges, and other school-related facilities that contribute to and support community education needs and objectives. The development standards for this land use designation vary by intensity and allow for development of buildings up to three stories in height. The land use designations adjacent to the Cañada College campus in Redwood City include Residential-Low (7 dwelling units/acres maximum [du/ac max]) to the north and south and Residential-Medium (20 du/ac max). Woodside is located to the west.

The Redwood City General Plan does not have land use policies that relate to the Project.

Redwood City Zoning Ordinance

The Cañada College campus is zoned as Residential Multi-Family (R-3) and Residential-Hillside (RH-20) in the Redwood City Zoning Ordinance. The R-3 zoning designation permits single-family dwellings, two-family (duplex) dwellings, multiple dwellings, and accessory dwellings. The RH-20 zoning designation permits single-family dwellings and accessory dwellings. Public or quasi-public uses are permitted in R-3 and RH-20 zoning designations with a conditional use permit.

Zoning designations adjacent to the campus include RH-20 to the north, east, and southeast and R-3 to the northeast.

Town of Woodside General Plan

The Woodside General Plan designates the Cañada College campus as Institutional (IN). This land use designation permits educational, governmental, and institutional uses, such as schools, libraries, places of worship, meeting halls, and public parks. The land use designations adjacent to the Cañada College campus in Woodside include Residential (R) to the northwest, west, south, and Open Space (OS) to the southeast. Redwood City is located to the east.

The Woodside General Plan does not have land use policies that relate to the Project.

Town of Woodside Zoning Ordinance

The Cañada College campus is zoned as Multi-Family Residential District (MFRD) Overlay Zoning in the Woodside Zoning Ordinance. The MFRD zoning designation permits multi-family residential use, including any use associated with a multi-family dwelling, including, but not limited to, garages and carports, exercise rooms, utility enclosures, and home occupations.

Zoning designations adjacent to the campus are Suburban Residential (SR) to the northeast, Rural Residential (RR) to the west and southwest, Special Conservation Planning-5 acres (SCP-5) to the west, and Open Space for Preservation of Natural Resources (OSN) to the northeast.

College of San Mateo

City of San Mateo General Plan

The San Mateo General Plan projects city planning goals to the year 2030 and designates the College of San Mateo (CSM) campus as Major Institution/Special Facility. This designation permits private and public institutional, educational, recreational, and community service uses. The land use designations adjacent to the CSM campus include Single-Family Residential to the southwest (within unincorporated San Mateo County); High-Density Multi-Family to the south; Executive Office to the southeast; and Utilities to the northeast. The town of Hillsborough is located to the north and west and State Route (SR) 92 is to the east

Table 3.9-1 lists the policies from the San Mateo General Plan that are relevant to the Project and an evaluation of the Project's consistency with those policies.

Table 3.9-1. Consistency with Relevant San Mateo General Plan Land Use Policies

Goal/Policy Number	General Plan Policy	Consistency Determination
LU 1.18	Major Institutions/Special Facilities. Encourage retention of major institutions and special facilities such as the San Mateo County Events Center, College of San Mateo, San Mateo County Hospital, Mills Health Center, and Peninsula Golf and Country Club. Allow reuse or redevelopment of institutions and special facilities subject to the approval of a Specific Plan and/or Master Plan.	**Consistent**. The Project would involve the demolition of the existing Building 8, Gymnasium, Building 12, East Hall, and Building 19, Emerging Technologies, to construct a new Building 8, Gymnasium, and Building 19, Center for Innovation and Emerging Technologies. These improvements would be consistent with Policy LU 1.18 because the college would not relocate, and Buildings 8 and 19 would be constructed on their current sites.
LU 4.12	Corporation Yard. Provide for such corporation yard functions as new vehicle repair facilities, administrative office space, and other facilities needed through 2030. Consider co-locating public works facilities and operations where feasible.	**Consistent**. The Project would renovate the Corporation Yard by expanding the existing yard and adding service vehicle protection and equipment storage areas. This improvement would be consistent with Policy LU 4.12 because the expansion of the yard would provide necessary storage space for the District's vehicles and equipment.
GOAL 8d	Increase new annual installations of solar or renewable energy systems consistent with the Sustainable Initiatives Plan.	**Consistent**. The Project would include the installation of up to seven renewable energy facilities.

Source: City of San Mateo 2010.

City of San Mateo Zoning Ordinance

The CSM campus is zoned as One Family Dwelling "A" (R1-A) in the San Mateo Zoning Ordinance. R1-A permits single-family detached dwellings, secondary units, accessory uses and structures, detached accessory structures containing no more than two plumbing fixtures or waste lines, home occupations, community care facilities licensed by the State of California, and temporary buildings used for construction purposes. Public and private educational uses are permitted with a special use permit.

Zoning designations adjacent to the CSM campus are Multiple Family Dwellings (R3) to the southwest; Two Family Dwellings (R2) to the south; Executive Park (E1-1) to the southeast; and Agricultural (A) to the northeast. The town of Hillsborough is located to the north and west.

Skyline College

City of San Bruno General Plan

The San Bruno General Plan projects city planning goals to 2025 and designates the majority of the Skyline College campus as Public/Quasi-Public. The Public/Quasi-Public designation permits government offices, fire and police facilities, transit stations, airports, and cemeteries.

Surplus Parcel B, the proposed site for the Skyline College residential complex, is designated as Low Density Residential. Low Density Residential permits 2.1–8.0 dwelling units per acre and single-family detached housing. Single-family attached housing (i.e., duplexes and townhomes) may be permitted in instances where clustering results in additional open space, provided that each dwelling unit has ground-floor living area and private open space.

The land use designations adjacent to Skyline College are Low Density Residential to the north, east, and southeast, and Parks/Open Space to the south. The city of Pacifica is to the west.

The San Bruno General Plan does not have land use policies that relate to the Project.

Table 3.9-2 lists the policies from the City of San Bruno General Plan that are relevant to the Project and an evaluation of the Project's consistency with those policies.

City of San Bruno Zoning Ordinance

As described previously, the residential complex is not exempt from San Bruno's zoning ordinance. The Skyline College campus is designated as Open Space (O) in the San Bruno Zoning Ordinance. Surplus Parcel B is also designated as O. Permitted uses in the O zoning district include crop and tree farming. Conditional uses permitted in the O zoning district include public and private parks, trails, schools, cemeteries, and uses which the planning commission finds to be consistent with the open space and conservation elements of the San Bruno General Plan.

The existing, adjacent zoning designations include Single Family Residential (R-1) to the north, northeast, and northwest of the campus. Open space and trails of the Golden Gate National Recreational Area are to the southwest, and San Francisco County's Jail #5 (San Bruno Complex) is to the south.

Table 3.9-2. Consistency with Relevant San Bruno General Plan Land Use Policies

Goal/Policy Number	General Plan Policy	Consistency Determination
LUD-3	During Plan review, protect the residential character of established neighborhoods by ensuring that new development conforms to surrounding design and scale.	**Consistent.** The Project would construct a residential complex on Surplus Parcel B. The residential complex would be surrounded by Low Density Residential neighborhoods to the north, east, and northwest and would include up to 71 housing units. The complex would be consistent with the scale of surrounding residential neighborhoods.
LUD-7	Require any subdivision or development involving construction of more than five units, regardless of the number of parcels, to undergo design review. Require provision of open spaces and pedestrian connections within multifamily projects, as well as an active street frontage along arterial roadways.	**Consistent.** The proposed residential complex would undergo design review as required by the City. The southeast end of the site would be retained as open space, which is consistent with the policy. There would be street access from College Drive and College Road.
LUD-E	Ensure that new development, especially in residential neighborhoods, is sensitive to existing uses, and is of the highest quality design and construction.	**Consistent.** The Project would undergo design review as required by the City to ensure the development is sensitive to existing uses and is of the highest quality design and construction.

Source: City of San Bruno 2009.

3.9.2 Environmental Setting

3.9.2.1 Cañada College

The Cañada College campus sits atop a hill and is generally separated from adjacent neighbors due to its higher elevation and buffers of adjacent, undeveloped land, including some densely wooded areas bordering the campus core on the east and west. The campus is within both Redwood City (to the east) and Woodside (to the west).

Adjacent land uses include hillside undeveloped land, single-family and multi-family dwellings and the Emerald Hills Golf Course to the north; campus athletic fields to the east, Interstate 280 to the southwest; and single-family and multi-family dwellings and Farm Hill Boulevard to the south and east.

3.9.2.2 College of San Mateo

The CSM campus sits on the top of a hill entirely within the city limits of San Mateo and is visually separated from adjacent land uses by steep topography. The city of Hillsborough is located to the north and west of campus.

Adjacent land uses include single-family housing nearby on the west side of campus; homes a distance away on the north and northwest side of campus; and the Hillsdale Boulevard/SR 92 interchange, and commercial and multi-family development on the south side of campus.

3.9.2.3 Skyline College

The Skyline College campus sits on a hilltop along the ridge of the coastal mountains that separate the Pacific Ocean from the San Francisco Bay. The campus is within an established suburban area entirely within the city limits of San Bruno.

Adjacent land uses include the Marisol single-family residential development to the northeast, residential neighborhoods to the north, college-owned open space to the east, open space and trails of Golden Gate National Recreation Areas to the southwest, and the San Francisco County Jail # 5 (San Bruno Complex) to the south. The undeveloped open space is described further in Section 3.13, *Recreation*.

3.9.3 Impacts Analysis

3.9.3.1 Methodology

Analysis of land use on and around the three college campuses involved a review of the general plan land use elements for each campus location. This included general plans from Redwood City, the Woodside, San Mateo, and San Bruno. Land use designation maps and zoning ordinances were also reviewed to determine whether any adjoining land uses would be affected.

3.9.3.2 Significance Criteria

The State CEQA Guidelines Appendix G (14 CCR 15000 et seq.) has identified significance criteria to be considered for determining whether a project could have significant impacts on existing land use and planning.

An impact would be considered significant if construction or operation of the Project would have any of the following consequences.

- Physically divide an established community.
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

Conflicts between a project and land use policies do not, in and of themselves, constitute significant environmental impacts. Policy conflicts are considered environmental impacts only when they would result in direct environmental effects. Decision-makers will need to consider the consistency of the proposed development with applicable plans and policies that do not directly relate to physical environmental issues when determining whether to approve or disapprove the project. As such, this discussion is provided to help decision-makers (i.e., the District Board of Trustees).

3.9.3.3 Impacts and Mitigation Measures

Cañada College

Impact CC-LUP-1: Physically divide an established community (no impact)

The Project would not physically divide an established community. As described in Chapter 2, *Project Description*, the Project includes the construction of two new buildings, the renovation of five buildings, one pedestrian improvement, the expansion of two parking lots, and the installation of up to two renewable energy facilities on the Cañada College campus. All proposed facility improvements would be within the boundaries of the established community of the campus. Therefore, the Project would not physically divide an established community, and there would be no impact.

Impact CC-LUP-2: Conflict with applicable land use plans, policies, or regulations (no impact)

As described in Chapter 2, *Project Description*, the campus boundaries fall within both Redwood City and Woodside. The Project would not conflict with applicable Redwood City or Woodside land use plans, policies, or regulations. As described above, the Project is exempt from the application of city and county zoning ordinances. All the proposed facility improvements are within campus boundaries and are consistent with the District's *2015 Facilities Master Plan Amendment*. The Project would generally conform to the intent of the respective land use designations.

As described above, the Redwood City General Plan designates the Cañada College campus as Schools. The Schools land use designation permits uses operated for public benefit, including public facilities, hospitals, schools, and parks. None of the proposed improvements at Cañada College would be within Redwood City's city limits. Since there would be no improvements within Redwood City, the Project would, therefore, be consistent with the Redwood City General Plan, and there would be no impact.

As described above, the Woodside General Plan designates the Cañada College campus as Institutional (IN). This land use designation permits educational, governmental, and institutional uses, such as schools, libraries, places of worship, meeting halls, and public parks. As described in Chapter 2, *Project Description*, the new Math/Science/Engineering building (Building 23) proposed at Cañada College would likely be three stories high. The new Building 1, Kinesiology/Wellness, would be two stories high. The Woodside General Plan has no height requirements. Additionally, the proposed improvements would remain educational, so the land uses would not change. Therefore, all proposed facility improvements would be consistent with the Woodside General Plan, and there would be no impact.

Impact CC-LUP-3: Conflict with any applicable habitat conservation plan or natural community conservation plan (no impact)

There is no known habitat conservation plan or natural community conservation plan that includes the campus area. Therefore, the Project would not conflict with any applicable habitat conservation plan or natural community conservation plan, and there would be no impact.

College of San Mateo

Impact CSM-LUP-1: Physically divide an established community (no impact)

The Project would not physically divide an established community. As described in Chapter 2, *Project Description*, the Project includes the construction of one new building, the renovation of seven buildings, and the installation of up to seven renewable energy facilities for the CSM campus. All proposed facility improvements would be within the boundaries of the established community of the campus. Therefore, the Project would not physically divide an established community, and there would be no impact.

Impact CSM-LUP-2: Conflict with applicable land use plans, policies, or regulations (no impact)

The Project would not conflict with applicable land use plans, policies, or regulations. As described above, the Project is exempt from the application of city zoning ordinances. All the proposed facility improvements are within campus boundaries and are consistent with the District's *2015 Facilities Master Plan Amendment*.

As described previously, the San Mateo General Plan designates CSM as Major Institution/Special Facility. The Major Institution/Special Facility land use designation permits recreational, educational, and medical facilities. The proposed improvements would remain educational, so the land uses would not change. Therefore, all proposed facility improvements would be consistent with the San Mateo General Plan, and there would be no impact.

Impact CSM-LUP-3: Conflict with any applicable habitat conservation plan or natural community conservation plan (no impact)

There is no known habitat conservation plan or natural community conservation plan that includes the campus area. Therefore, the Project would not conflict with any applicable habitat conservation plan or natural community conservation plan, and there would be no impact.

Skyline College

Impact SC-LUP-1: Physically divide an established community (no impact)

As described in Chapter 2, *Project Description*, the Project includes construction of four new buildings, a residential development with up to 71 dwelling units, the renovation of three buildings, two pedestrian improvements, the expansion of one parking lot, and the installation of up to four renewable energy facilities on the Skyline College campus. All proposed instructional facility improvements would be within the boundaries of the established community of the campus.

The proposed residential complex would develop the existing, vacant Surplus Parcel B with single-family housing for the general public and multi-family housing for college faculty and staff. The new housing would be within the boundaries of the established community of the Skyline College campus. Therefore, the Project would not physically divide an established community, and there would be no impact.

Impact SC-LUP-2: Conflict with applicable land use plans, policies, or regulations (less than significant with mitigation)

City of San Bruno General Plan

As described above, the San Bruno General Plan designates the majority of the Skyline College campus as Public/Quasi-Public. The Public/Quasi-Public land use designation permits schools, government offices, fire and police facilities, transit stations, airports, and cemeteries. The proposed educational improvements would remain within the Skyline College campus boundaries.

Surplus Parcel B, the proposed site for the new residential complex, is designated as Low Density Residential. Low Density Residential permits up to 8 du/ac and single-family detached housing. As described in Chapter 2, *Project Description*, the Project proposes 47 single-family and 24 multi-family units on 8 acres of land. This exceeds the maximum dwelling units permitted under the Low Density Residential designation. The parcel would be subdivided into two parcels, a 6-acre parcel for the proposed single-family dwellings and a 2-acre parcel for the proposed multi-family dwellings. The District will request that the City of San Bruno consider a general plan amendment and/or a planned development permit to re-designate the 2-acre portion of Surplus Parcel B (8 acres in total) as Medium Density Residential (8.1-24.0 du/ac) in order to accommodate the proposed multi-family units. This land use designation permits up to 24 dwelling units per acre. **Table 3.9-3** illustrates how the proposed general plan amendment would apply to Surplus Parcel B.

Table 3.9-3. Proposed General Plan Land Use Designations for the Skyline College Residential Complex

Parcel	Proposed Units	Size (acres)	Proposed Land Use Designation	Project Density
Southwest parcel	Up to 24 multi-family units	Up to 2	Medium Density residential (8.1 to 24.0 du/ac) [a]	12 du/ac
Northeast parcel	Up to 47 single-family, detached	Up to 6	Low density residential (up to 8 du/ac)[b]	7.8 du/ac

Note:
[a] This may require a general plan amendment and/or a planned development permit.
[b] This is the existing general plan designation and is not proposed for change.
du/acre = dwelling units per acre

The proposed educational improvements at the Skyline College campus would be consistent with the general plan's Public/Quasi-Public land use designation, so land uses would not change. The residential complex is not consistent with the existing land use designation, but if the proposed general plan amendment is approved, the residential complex would comply with the new designation.

City of San Bruno Zoning Ordinance

As described above, the Skyline College campus and Surplus Parcel B are designated as Open Space (O) in the San Bruno Zoning Ordinance. Permitted uses in the O zoning district include crop and tree farming. Conditional uses permitted in the O zoning district include public and private parks, trails, schools, cemeteries, and uses which the planning commission finds to be consistent with the open space and conservation elements of the San Bruno General Plan. Note that the existing O zoning

district is not consistent with the Low Density Residential general plan designation that applies to Surplus Parcel B. This conflicts with Government Code Section 65860, which requires zoning ordinance consistency with the general plan.

Surplus Parcel B would be subdivided into two parcels. As part of implementation of **Mitigation Measure SC-LUP-1**, the 2-acre parcel would be rezoned as Medium Density Residential (R-3) and the 6-acre northeast parcel would be rezoned as Single Family Residential (R-1). R-3 permits single-family dwellings, multi-family dwellings, accessory buildings and uses, small family day care homes, and special residential care facilities. R-1 permits single-family dwellings, accessory buildings and uses, small family day care homes, and special residential care facilities. These zoning designations would permit the Project's development of multi-family and single-family dwellings. The R-1 zoning would be consistent with the existing Low Density Residential land use designation of the general plan and would bring the zoning into compliance with California Government Code Section 65860. In addition, with implementation of **Mitigation Measure SC-LUP-1**, which would require a general plan amendment so that the R-3 zoning would be consistent with the general plan, this impact would be less than significant.

Mitigation Measure SC-LUP-1: Rezone Surplus Parcel B and amend the general plan land use designation to permit R-3 dwellings at Skyline College

The District will submit an application to the City of San Bruno to rezone Surplus Parcel B to R-1 and R-3 and amend the General Plan to permit multi-family dwellings on a portion of Surplus Parcel B. If the City declines to approve the increase in density, then the District will proceed with planning-compliant residential development, upon receipt of necessary subdivision approvals from the City, consistent with the general plan. Therefore, the residential complex at Skyline College would be consistent with San Bruno's general plan.

Impact SC-LUP-3: Conflict with any applicable habitat conservation plan or natural community conservation plan (no impact)

There is no known habitat conservation plan or natural community conservation plan that includes the campus area. Therefore, the Project would not conflict with any applicable habitat conservation plan or natural community conservation plan, and there would be no impact.

3.9.3.4 Cumulative Impacts

Cumulative impacts are examined using the plan/program approach. The General Plans of the cities and counties along the San Francisco Peninsula provide the backdrop for substantial future development over the next decades, including commercial, office, industrial, and residential uses.

Cañada College

The key cumulative land use impact within San Mateo County is the substantial increase in tech industry office space and the related pressure on housing demand. This is creating conflicts with general plans as cities approve new office parks and try to accommodate additional affordable housing by approving higher density residential development. Conflicts center on the compatibility of new office parks and higher density residential development with existing land uses, including established residential neighborhoods.

The Project would not contribute to any significant cumulative land use impact associated with the Cañada College vicinity. No further discussion of cumulative impacts is required.

College of San Mateo

The key cumulative land use impact within San Mateo County is the substantial increase in tech industry office space and the related pressure on housing demand. This is creating conflicts with general plans as cities approve new office parks and try to accommodate additional affordable housing by approving higher density residential development. Conflicts center on the compatibility of new office parks and higher density residential development with existing land uses, including established residential neighborhoods.

The Project would not contribute to any significant cumulative land use impacts associated with the CSM vicinity. No further discussion of cumulative impacts is required.

Skyline College

The key cumulative land use impact within San Mateo County is the substantial increase in technology industry office space and the related pressure on housing demand. This is creating conflicts with general plans as cities approve new office parks and try to accommodate additional affordable housing by approving higher density residential development. Conflicts center on the compatibility of new office parks and higher density residential development with existing land uses, including established residential neighborhoods.

A portion of the Project would be inconsistent with the San Bruno General Plan because it proposes higher residential density (Medium Density Residential) development on a portion of Surplus Parcel B than is currently allowed (the current land use designation is Low Density Residential). Although this development could help address the county-wide problem of housing availability and affordability, the increased housing density on the site could contribute to existing land use conflicts related to higher density residential projects within the county. However, the proposed Medium Density Residential portion of the residential development would be close to the campus, which is an existing high-intensity land use. That association reduces the level of conflict with adjoining existing residential development in San Bruno and the county. This would not be a considerable contribution to a significant cumulative impact.

3.10 Noise

This section describes the regulatory and environmental setting for noise. It also describes noise impacts that would result from implementation of the project and mitigation for significant impacts, where feasible and appropriate.

3.10.1 Regulatory Setting

The following regulations are relevant to noise and apply to implementation of the Project on all three campuses, unless otherwise specified.

3.10.1.1 Federal

Generally, the federal government sets noise standards for transportation-related noise sources closely linked to interstate commerce. These sources include aircraft, locomotives, and trucks. No federal noise standards are directly applicable to the Project.

3.10.1.2 State

The state government sets noise standards for transportation noise sources such as automobiles, light trucks, and motorcycles. Noise sources associated with industrial, commercial, and construction activities are generally subject to local control through noise ordinances and general plan policies.

California Code

Part 2, Title 24 of the California Code of Regulations, California Noise Insulation Standards, establishes minimum noise insulation standards to protect persons within new hotels, motels, dormitories, long-term care facilities, apartment houses, and dwellings other than single-family residences. Under this regulation, interior noise levels attributable to exterior noise sources cannot exceed 45 L_{dn} in any habitable room.

3.10.1.3 Local

As stated in Section 2.6 of Chapter 2, *Project Description*, the District is exempt from the application of city and county zoning ordinances, except the proposed residential complex at Skyline College because it is a non-educational use. However, the current zoning and applicable general plan provisions for each campus are provided for informational purposes.

This section describes the local noise regulations for the different cities (Redwood City, San Mateo, and San Bruno) and the town (Woodside) within San Mateo County where the three colleges are located; this information has been provided for context. The District uses San Mateo County's noise standards as its standard against which to judge the impacts of the Project. The use of County standards provides continuity among the noise analyses being prepared for Project-related construction activities on all three campuses.

Hours of the day that construction is allowed vary between the local jurisdictions as follows:

- County of San Mateo: 7:00 a.m. to 6:00 p.m. on weekdays, 9:00 a.m. to 5:00 p.m. on Saturday, and not at all on Sundays, Thanksgiving, or Christmas.
- Redwood City: 7:00 a.m. to 8:00 p.m. on weekdays.
- Woodside: 7:30 a.m. to 5:30 p.m. on weekdays and 8:00 a.m. to 1:00 p.m. on Sundays.
- San Mateo: 7:00 a.m. to 7:00 p.m. on weekdays, 8:00 a.m. to 5:00 p.m. on Saturdays, and 12:00 p.m. to 4:00 p.m. on Sundays and holidays.
- San Bruno: 85 dBA limit at 100 feet between 7:00 a.m. and 10:00 p.m. and 60 dBA limit at 100 feet between 10:00 p.m. and 7:00 a.m.

The District would limit construction to the hours of 6:00 a.m. to 7:00 p.m. on weekdays and weekends, if necessary. Accordingly, the District's construction plan may not be consistent with local limits on hours of construction.

County of San Mateo General Plan

The County of San Mateo's General Plan Noise Element (as adopted in November 1986), contains planning guidelines relating to noise and identifies goals and policies to support achievement of those goals. Noise element guidelines relate primarily to land use compatibility with noise sources such as traffic, aircraft, and trains. For the purposes of identifying noise compatibility for planning, the noise element defines "noise impact areas" as those areas experiencing noise levels of 60 community noise equivalent level (CNEL) or greater.

The County's exterior noise standards are described below and in **Table 3.10-1** (San Mateo County Municipal Code, Chapter 4.88.330).

> It is unlawful for any person at any location within the unincorporated area of the County to create any noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person which causes the exterior noise level when measured at any single or multiple family residence, school, hospital, church, public library situated in either the incorporated or unincorporated area to exceed the noise level standards as set forth in the following table.

Table 3.10-1. County of San Mateo Exterior Noise Standard

Category	Cumulative Number of Minutes in any 1-hour time period	Daytime 7 a.m.–10 p.m. (dBA)	Nighttime 10 p.m.–7 a.m. (dBA)
1	30	55	50
2	15	60	55
3	5	65	60
4	1	70	65
5	0	75	70

dBA = A-weighted decibels

The County's interior noise standards are described below and in **Table 3.10-2** (San Mateo County Municipal Code, Chapter 4.88.340).

> No person shall, at any location within the unincorporated area of the County operate, or cause to be operated within a dwelling unit, any source of sound, or create, or allow the creation of, any noise which causes the noise level when measured inside a receiving dwelling unit with windows in their normal seasonal configuration to exceed the following noise level standards as set forth in the following table.

Table 3.10-2. County of San Mateo Interior Noise Standards for Dwelling Units

Category	Cumulative Number of Minutes in any 1-hour time period	Daytime 7 a.m.–10 p.m. (dBA)	Nighttime 10 p.m.–7 a.m. (dBA)
1	5	45	40
2	1	50	45
3	0	55	50

dBA = A-weighted decibels

The County of San Mateo noise standard includes the following exemption.

> Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property, provided said activities do not take place between the hours of 6:00 p.m. and 7:00 a.m. weekdays, 5:00 p.m. and 9:00 a.m. on Saturdays or at any time on Sundays, Thanksgiving and Christmas.

Redwood City General Plan

The Redwood City General Plan Noise Element contains planning guidelines relating to minimize the impact of noise on people through noise reduction and suppression techniques and identifies policies to support achievement of those goals.

Noise Policy N-3 requires all exterior noise sources (construction operations, air compressors, pumps, fans, and leaf blowers) to use available noise suppression devices and techniques to bring exterior noise down to acceptable levels compatible with adjacent land uses.

The City's noise compatibility chart indicates that exterior noise above 60 dBA, CNEL, would result in a noise impact on residential and educational land uses.

The Redwood City Noise Ordinance, Chapter 24, Noise Regulation, states the following.

> Noise limitations upon work on properties in or near residential districts: (Includes any and all deliveries). Noise is prohibited Mondays through Fridays, 8:00 p.m. to 7:00 a.m.; Saturdays, Sundays and holidays, all day. During the foregoing periods, no noise above the local ambient level in residential districts shall be generated by construction work or activities. Work noise limits shall be observed at all other times:
>
> 1. No individual item of machinery, equipment, or device used in or near a residential district shall produce sound in excess of 110 dBA, measured twenty-five feet from such machinery, equipment, or device;
> 2. Work noise level at any point outside of the construction site property plane shall not exceed 110 dBA within any part of a residential district.

Town of Woodside Municipal Code

The Woodside General Plan Noise Element, as adopted in 2012, does not have guidelines that are specifically relevant to the Project.

While the Town of Woodside does not have a noise ordinance, the City's municipal code puts limitations on construction hours and specifies noise limits at construction sites.

> *Hours of operation.* All site development and building construction operations shall be carried on only between the hours of 7:30 a.m. and 5:30 p.m., Monday through Friday, and 8:00 a.m. to 1:00 p.m. Saturdays, unless the town engineer finds that work at other times or days would not imperil or inconvenience the public, or create a nuisance, in which case he/she may by written permission, allow the work to proceed during such other hours as may be necessary.

City of San Mateo Municipal Code

The following construction provision is in the San Mateo Municipal Code (Chapter 7.30.060(e)).

> Construction, alteration, repair or land development activities which are authorized by a valid city permit shall be allowed on weekdays between the hours of seven a.m. and seven p.m., on Saturdays between the hours of eight a.m. and five p.m., and on Sundays and holidays between the hours of noon and four p.m., or at such other hours as may be authorized or restricted by the permit, if they meet at least one of the following noise limitations:
>
> 1. No individual piece of equipment shall produce a noise level exceeding ninety dB at a distance of twenty-five feet. If the device is housed within a structure or trailer on the property, the measurement shall be made outside the structure at a distance as close to twenty-five feet from the equipment as possible.
> 2. The noise level at any point outside of the property plane of the project shall not exceed ninety dB.

City of San Bruno General Plan

The following noise policies in the San Bruno General Plan Health and Safety Element are relevant to the proposed housing development at the Skyline College campus. As discussed in Chapter 2, *Project Description*, non-educational uses are not exempt from the City of San Bruno's zoning ordinances; thus, these policies would apply to the proposed housing development that is part of the Project.

> **HS-32:** Encourage developers to mitigate ambient noise levels adjacent to major noise sources by incorporating acoustical site planning into their projects. Utilize the City's Building Code to implement mitigation measures, such as:
>
> - Incorporating buffers and/or landscaped berms along high-noise roadways or railways;
> - Incorporating traffic calming measures and alternative intersection design within and/or adjacent to the project;
> - Using reduced-noise pavement (rubberized asphalt); and
> - Incorporating state-of-the-art structural sound attenuation measures.
>
> **HS-33:** Prevent the placement of new noise sensitive uses unless adequate mitigation is provided. Establish insulation requirements as mitigation measures for all development, per the standards in Table 7-1.
>
> **HS-35:** Require developers to comply with relevant noise insulation standards contained in Title 24 of the California Code of Regulations (Part 2, Appendix Chapter 12A).

HS-36: Encourage developers of new residential projects to provide noise buffers other than sound walls, such as vegetation, storage areas, or parking, as well as site planning and locating bedrooms away from noise sources

HS-38: Require developers to mitigate noise exposure to sensitive receptors from construction activities. Mitigation may include a combination of techniques that reduce noise generated at the source, increase the noise insulation at the receptor, or increase the noise attenuation rate as noise travels from the source to the receptor.

In addition, the City's General Plan Health and Safety Element outlines the acceptable noise limits for new land uses, as shown in **Table 3.10-3**.

Table 3.10-3. Land Use Compatibility for Community Noise Environments

	CNEL						
Land Use Category	<55	55–60	60–65	65–70	70–75	75–80	80–85
Residential—Single Family	*	**	**	**	***	****	****
Residential—Multiple Family	*	*	**	**	***	****	****
Transient Lodging—Motels, Hotels	*	*	**	**	***	***	****
Schools, Libraries, Churches, Hospitals, Nursing Homes	*	*	**	**	***	***	****
Auditoriums, Concert Halls, Amphitheaters	**	**	**	***	***	***	***
Sports Arena, Outdoor Spectator Sports, Parking	**	**	**	**	***	***	***
Playgrounds, Parks	*	*	*	**	***	****	****
Golf Courses, Riding Stables, Water Recreation, Cemeteries	*	*	*	*	***	***	****
Office Buildings, Business, Commercial and Professional	*	*	*	**	**	***	***
Industrial, Manufacturing, Utilities, Agriculture	*	*	*	*	**	***	***

* Normally Acceptable	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
** Conditionally Acceptable	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.
*** Normally Unacceptable	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
**** Clearly Unacceptable	New construction or development shall not be undertaken.

Source: City of San Bruno 2009: Table 7-2.
CNEL = community noise equivalent level

City of San Bruno Municipal Code

The following construction ordinance is in the San Bruno Municipal Code.

> No person shall, within any residential zone, or within a radius of five hundred feet therefrom, operate equipment or perform any outside construction or repair work on any building, structure, or other project, or operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction-type device which shall exceed, between the hours of seven a.m. and ten p.m., a noise level of eighty-five decibels as measured at one hundred feet, or exceed between the hours of ten p.m. and seven a.m. a noise level of sixty decibels as measured at one hundred feet, unless such person shall have first obtained a permit therefor from the director of public works. No permit shall be required to perform emergency work.

3.10.2 Environmental Setting

3.10.2.1 Fundamentals of Environmental Noise and Vibration

Overview of Noise and Sound

Noise is commonly defined as unwanted sound that annoys or disturbs people and potentially causes an adverse psychological or physiological effect on human health. Because noise is an environmental pollutant that can interfere with human activities, evaluation of noise is necessary when considering the environmental impacts of a proposed project.

Sound is mechanical energy (vibration) transmitted by pressure waves over a medium such as air or water. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level is the most common descriptor used to characterize the loudness of an ambient (existing) sound level. Although the decibel (dB) scale, a logarithmic scale, is used to quantify sound intensity, it does not accurately describe how sound intensity is perceived by human hearing. The human ear is not equally sensitive to all frequencies in the entire spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive in a process called *A-weighting*, written as *dBA* and referred to as *A-weighted decibels*. **Table 3.10-4** defines sound measurements and other terminology used in this section, and **Table 3.10-5** summarizes typical A-weighted sound levels for different noise sources.

In general, human sound perception is such that a change in sound level of 1 dB cannot typically be perceived by the human ear, a change of 3 dB is barely noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level, if sound levels increase or decrease, respectively.

Different types of measurements are used to characterize the time-varying nature of sound. These measurements include the equivalent sound level (L_{eq}), the minimum and maximum sound levels (L_{min} and L_{max}), percentile-exceeded sound levels (such as L_{10}, L_{20}), the day-night sound level (L_{dn}), and the community noise equivalent level (CNEL). L_{dn} and CNEL values differ by less than 1 dB. As a matter of practice, L_{dn} and CNEL values are considered to be equivalent and are treated as such. These measurements are defined in **Table 3.10-4**.

Table 3.10-4. Definition of Sound Measurements

Sound Measurements	Definition
Decibel (dB)	A unitless measure of sound on a logarithmic scale, which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micro-pascals.
A-Weighted Decibel (dBA)	An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
C-Weighted Decibel (dBC)	The sound pressure level in decibels as measured using the C-weighting filter network. The C-weighting is very close to an unweighted or flat response. C-weighting is only used in special cases when low-frequency noise is of particular importance. A comparison of measured A- and C-weighted level gives an indication of low frequency content.
Maximum Sound Level (Lmax)	The maximum sound level measured during the measurement period.
Minimum Sound Level (Lmin)	The minimum sound level measured during the measurement period.
Equivalent Sound Level (Leq)	The equivalent steady state sound level that in a stated period of time would contain the same acoustical energy.
Percentile-Exceeded Sound Level (Lxx)	The sound level exceeded xx % of a specific time period. L10 is the sound level exceeded 10% of the time. L90 is the sound level exceeded 90% of the time. L90 is often considered to be representative of the background noise level in a given area.
Day-Night Level (Ldn)	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring during the period from 10:00 p.m. to 7:00 a.m.
Community Noise Equivalent Level (CNEL)	The energy average of the A-weighted sound levels occurring during a 24-hour period with 5 dB added to the A-weighted sound levels occurring during the period from 7:00 p.m. to 10:00 p.m. and 10 dB added to the A-weighted sound levels occurring during the period from 10:00 p.m. to 7:00 a.m.
Vibration Velocity Level (Or Vibration Decibel Level, VdB)	The root mean square velocity amplitude for measured ground motion expressed in dB.
Peak Particle Velocity (Peak Velocity or PPV)	A measurement of ground vibration defined as the maximum speed (measured in inches per second) at which a particle in the ground is moving relative to its inactive state. PPV is usually expressed in inches/second.
Frequency: Hertz (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure.

Table 3.10-5. Typical A-Weighted Sound Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	—110—	Rock band
Jet flyover at 1,000 feet		
	—100—	
Gas lawnmower at 3 feet		
	—90—	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	—80—	Garbage disposal at 3 feet
Noisy 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 in next room
Quiet urban nighttime	—40—	Theater, large conference room (background)
Quiet suburban nighttime		
	—30—	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	—20—	
		Broadcast/recording studio
	—10—	
	—0—	

Source: California Department of Transportation 2013.

For a point source, such as a stationary compressor or construction equipment, sound attenuates (lessens in intensity) based on geometry at a rate of 6 dB per doubling of distance. For a line source, such as free flowing traffic on a freeway, sound attenuates at a rate of 3 dB per doubling of distance (California Department of Transportation 2013). Atmospheric conditions including wind, temperature gradients, and humidity can change how sound propagates over distance and can affect the level of sound received at a given location. The degree to which the ground surface absorbs acoustical energy also affects sound propagation. Sound that travels over an acoustically absorptive surface such as grass attenuates at a greater rate than sound that travels over a hard surface such as pavement. The increased attenuation is typically in the range of 1–2 dB per doubling of distance. Barriers such as buildings and topography that block the line of sight between a source and receiver also increase the attenuation of sound over distance.

Community noise environments are generally perceived as *quiet* when the 24-hour average noise level is below 45 dBA, *moderate* in the 45 to 60 dBA range, and *loud* above 60 dBA. Very noisy urban residential areas are usually around 70 dBA CNEL. Along major thoroughfares, roadside noise levels are typically between 65 and 75 dBA CNEL. Increments of 3 to 5 dB to existing 1-hour L_{eq}, or to the

CNEL, are commonly used as thresholds for an adverse community reaction to a noise increase. However, there is evidence that incremental thresholds in this range may not be sufficiently protective in areas where noise-sensitive uses are located and CNEL is already high (i.e., above 60 dBA). In these areas, limiting noise increases to 3 dB or less is recommended (Federal Transit Administration 2006). Noise intrusions that cause short-term interior levels to rise above 45 dBA at night can disrupt sleep. Exposures to noise levels greater than 85 dBA of 8 hours or longer can cause permanent hearing damage.

Overview of Ground-borne Vibration

Operation of heavy construction equipment, particularly pile driving equipment and other impact devices (e.g., pavement breakers), create seismic waves that radiate along the surface of and downward into the ground. These surface waves can be felt as ground vibration. Vibration from operation of this equipment can result in effects ranging from annoyance of people to damage of structures. Variations in geology and distance result in different vibration levels containing different frequencies and displacements. In all cases, vibration amplitudes decrease with increasing distance.

Perceptible ground-borne vibration is generally limited to areas within a few hundred feet of construction activities. As seismic waves travel outward from a vibration source, they cause rock and soil particles to oscillate. The actual distance that these particles move is usually only a few ten-thousandths to a few thousandths of an inch. The rate or velocity (in inches per second) at which these particles move is the commonly accepted descriptor of the vibration amplitude, referred to as the *peak particle velocity* (PPV).

Vibration amplitude attenuates over distance and is a complex function of how energy is imparted into the ground and the soil or rock conditions through which the vibration is traveling. The following equation is used to estimate the vibration level at a given distance for typical soil conditions. PPV_{ref} is the reference PPV at 25 feet (**Table 3.10-6**).

$$PPV = PPV_{ref} \times (25/Distance)^{1.5}$$

Table 3.10-6 summarizes typical vibration levels generated by construction equipment at the reference distance of 25 feet and other distances as determined using the attenuation equation above.

Table 3.10-6. Vibration Source Levels for Construction Equipment

Equipment	PPV at 25 Feet	PPV at 50 Feet	PPV at 75 Feet	PPV at 100 Feet	PPV at 175 Feet
Pile driver (sonic/vibratory)	0.734	0.2595	0.1413	0.0918	0.0396
Hoe ram	0.089	0.0315	0.0171	0.0111	0.0048
Large bulldozer	0.089	0.0315	0.0171	0.0111	0.0048
Loaded trucks	0.076	0.0269	0.0146	0.0095	0.0041
Jackhammer	0.035	0.0124	0.0067	0.0044	0.0019
Small bulldozer	0.003	0.0011	0.0006	0.0004	0.0002

Source: Federal Transit Administration 2006.
PPV = peak particle velocity

Table 3.10-7 and **Table 3.10-8** summarize guidelines developed by the California Department of Transportation (Caltrans) for damage and annoyance potential from transient and continuous vibration that is usually associated with construction activity. Equipment or activities typical of continuous vibration include: excavation equipment, static compaction equipment, tracked vehicles, traffic on a highway, vibratory pile drivers, pile-extraction equipment, and vibratory compaction equipment. Equipment or activities typical of single-impact (transient) or low-rate repeated impact vibration include: impact pile drivers, blasting, drop balls, "pogo stick" compactors, and crack-and-seat equipment.

Table 3.10-7. Vibration Damage Potential Threshold Criteria Guidelines

	Maximum PPV (inches/second)	
Structure and Condition	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely Fragile Historic Buildings, Ruins, Ancient Monuments	0.12	0.08
Fragile Buildings	0.2	0.1
Historic, Some Old Buildings	0.5	0.25
Older Residential Structures	0.5	0.3
New Residential Structures	1.0	0.5
Modern Industrial/Commercial Buildings	2.0	0.5

Source: California Department of Transportation 2004.
Note: Transient sources create a single isolated vibration event, such as blasting or drop balls.
Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.
PPV = peak particle velocity

Table 3.10-8. Vibration Annoyance Potential Criteria Guidelines

	Maximum PPV (inches/second)	
Structure and Condition	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Source: Federal Transit Administration 2006.
Note: Transient sources create a single isolated vibration event, such as blasting or drop balls.
Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.
PPV = peak particle velocity

Ground-borne vibration can also be quantified by the root-mean-square (RMS) velocity amplitudes, which is useful for assessing human annoyance; the RMS amplitude is expressed in terms of the velocity level in decibel units (VdB). The background vibration velocity level in residential areas is usually around 50 VdB or lower. The vibration velocity level threshold of perception for humans is approximately 65 VdB. Most perceptible indoor vibration is caused by sources within buildings, such as the operation of mechanical equipment, movement of people, or the slamming of doors.

Typical outdoor sources of perceptible ground-borne vibration are heavy construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration from traffic is rarely perceptible.

Existing Noise Levels

Locations where people reside or where the presence of noise could adversely affect the use of the land are generally considered sensitive land uses. Typical sensitive receptors include residents, school children, hospital patients, and the elderly. The sections below discuss the sensitive land uses in the vicinity of each campus.

Short-Term Noise Monitoring

In order to characterize the existing noise environment, short-term measurements of 15 minutes in duration were conducted at sensitive land uses in the vicinity of each campus. ICF International noise analysts selected the noise monitoring sites to characterize existing ambient noise levels at representative locations in the Project area near noise-sensitive land uses. Short-term measurements focused on sensitive land uses both on and off the campuses. On campus sensitive land uses include theater and music facilities, and libraries. Measurements at off-campus locations focused on residences. **Tables 3.10-9** through **3.10-11** summarize the results of the short-term noise measurements conducted. **Figures 3.10-1a** through **3.10-1c** show the measurement locations where the short-term measurements were conducted.

Long-Term Noise Monitoring

Continuous (~24 hour) ambient noise measurements were conducted between May 19, 2015, and May 20, 2015, at two measurement locations at each campus. For the long-term measurement sites, existing sensitive land uses (i.e., residences and a school) in the vicinity of the campuses were the focus of the analysis. **Tables 3.10-9** through **3.10-11** summarize the results of the long-term noise measurements conducted. **Figures 3.10-1a** through **3.10-1c** show the measurement locations where the long-term measurements were conducted.

Existing Ground-borne Vibration Levels

The most common sources of ground-borne vibration are construction activities, roadway truck traffic, and trains. Existing sources of ground-borne vibration at the campuses are limited to the occasional large delivery truck. A large loaded truck can generate ground-borne vibration velocity levels as high as about 77 VdB at 50 feet from the source (Federal Transit Administration 2006). As described above, the vibration velocity level threshold of perception for humans is approximately 65 VdB. Therefore, a large loaded truck can potentially produce vibration that is perceptible. However, large delivery trucks traveling on smooth well maintained roads rarely produce perceptible ground-borne vibration.

3.10.2.2 Cañada College

The Cañada College campus is located in a semi-rural area with many undeveloped open space areas adjacent to the campus. The predominant land uses surrounding the campus are scattered single-family residences. Other land uses in the larger campus vicinity include Barkley Fields and Park, the Emerald Hills Golf Course, and several apartment and condominium developments. The Cañada Vista Apartments, a multi-family housing development for faculty and staff that is associated with the college, are located on the eastern side of the campus.

The single-family residences located on the northern side of the campus, north of Campus Circle Road, would be located approximately 125 feet from Project construction activity. In addition to distance, this is at a significant elevation difference from the potential site locations of the new Building 23 (Math/Science/Engineering) and the expanded Lot 10. Construction would also take place at Building 1, Kinesiology/Wellness, and, because of the central location of this building on campus, the nearest off-campus residence is located over 1,000 feet away. The Cañada Vista Apartments are located approximately 600 feet from the Kinesiology/Wellness Building (Building 1). The land uses surrounding the campus are located within Woodside and Redwood City.

Table 3.10-9 summarizes the 15-minute L_{eq} and L_{dn} values recorded during the short-term and long-term noise measurements, respectively. **Figure 3.10-1a** shows the measurement locations where the short-term and long-term measurements were conducted.

Table 3.10-9. Summary of Noise Measurements Conducted at Cañada College

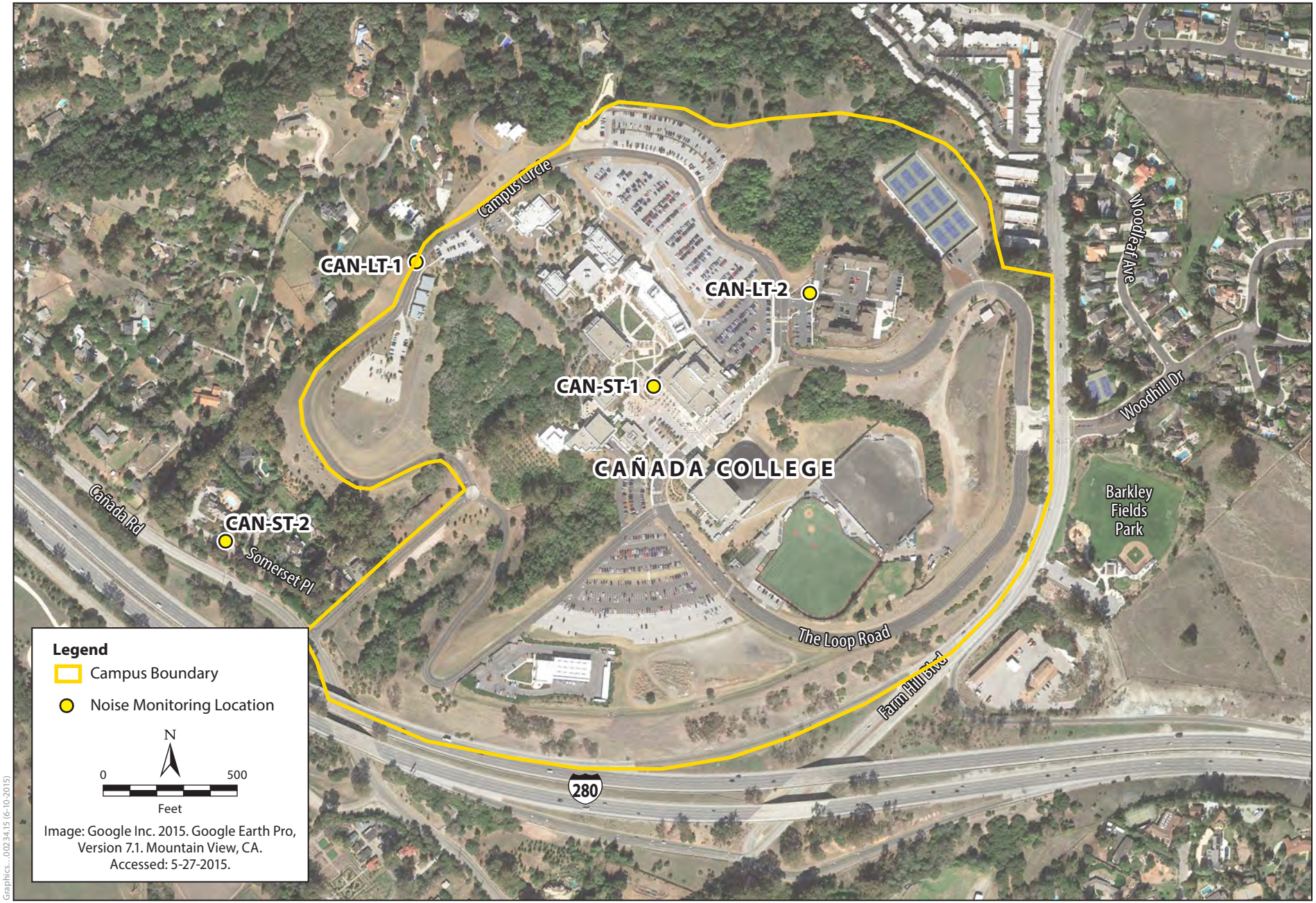
Site	Location	Noise Level
Short-Term Measurements Results		L_{eq}
CAN ST-1	Adjacent to Cañada College Theater	63.7
CAN ST-2	Somerset Place, 300 feet east of Godetia Drive	69.1
Long-Term Measurement Results		L_{dn}
CAN LT-1	North side of Campus Circle Road, across from Building 19	54.5
CAN LT-2	Olive Court at the Cañada Vista Apartments	55.7

3.10.2.3 College of San Mateo

The College of San Mateo (CSM) campus is located in a semi-rural area with undeveloped open space areas that surround the campus. To the north and west are single-family residence neighborhoods. South of the campus, there are single-family residences, townhouses, the Western Hills Church, and New Community Mission Church. On the east and southeast sides of the campus, there are commercial land uses and the Serendipity School, which is a private preschool facility. Isolated single-family residences are located north of campus.

The Serendipity School is located approximately 700 feet southeast of Building 8 (Gymnasium), where construction activities would take place. Single-family residences are located approximately 150 feet northeast of the Corporation Yard and approximately 700 feet northeast of Building 12, East Hall, where additional construction activity would take place. On-campus buildings that could be affected by demolition and reconstruction of the Gymnasium include Building 5 (Wellness) and the Library, which are located approximately 160–190 feet from the Gymnasium. On-campus buildings that could be affected by demolition of Buildings 12 and 19 and construction of Building 19 include Building 10, College Center; Building 36, Science/Planetarium; Building 20, Horticulture; and Building 20A, Greenhouse, which would located approximately 40–90 feet from the new Building 19, Center for Innovation and Emerging Technologies. Land uses surrounding the campus are located in the city of San Mateo.

Table 3.10-10 summarizes the 15-minute L_{eq} and L_{dn} values recorded during the short-term and long-term noise measurements, respectively. **Figure 3.10-1b** shows the measurement locations where the short-term and long-term measurements were conducted.



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Figure 3.10-1a
Noise Monitoring Locations Conducted at Cañada College



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Figure 3.10-1b
Noise Monitoring Locations Conducted at College of San Mateo



Graphics... 0023415 (6-10-2015)

Figure 3.10-1c
Noise Monitoring Locations Conducted at Skyline College

Table 3.10-10. Summary of Noise Measurements Conducted at College of San Mateo

Site	Location	Noise Level
Short-Term Measurements Results		L_{eq}
CSM ST-1	Courtyard of theater and music buildings on campus	57.0
CSM ST-2	Adjacent to campus library building	55.9
Long-Term Measurement Results		L_{dn}
CSM LT-1	Clearview Way, in front of Serendipity School	61.4
CSM LT-2	Residential property near Tournament Dr. and Paradise Ct.	52.3

3.10.2.4 Skyline College

The Skyline College campus is also located in a semi-rural area with undeveloped open space areas that surround the western and southern sides of the campus. The San Francisco County Jail #5 (San Bruno Complex) is located southeast of the campus. On the eastern and northern sides of the campus there are single-family residences neighborhoods. In addition, the former Pacific Heights Middle School is at the northern point of the campus, and the Loma Chica School, which includes the College child development center, is located north of the campus. Land uses surrounding the campus are located in San Bruno.

Table 3.10-11 summarizes the 15-minute L_{eq} and L_{dn} values recorded during the short-term and long-term noise measurements, respectively. **Figure 3.10-1c** shows the measurement locations where the short-term and long-term measurements were conducted. No noise measurements were taken on campus. However, noise levels measured directly adjacent to the campus are considered to be representative of on-campus noise levels.

Table 3.10-11. Summary of Noise Measurements Conducted at Skyline College

Site	Location	Noise Level
Short-Term Measurements Results		L_{eq}
SKY ST-1	West end of cul-de-sac, Aegean Way	57.6
Long-Term Measurement Results		L_{dn}
SKY LT-1	End of cul-de-sac, Moulton Drive	54.7
SKY LT-2	Empty lot, future potential housing development, adjacent to College Rd	61.5

3.10.3 Impacts Analysis

3.10.3.1 Methodology

Short-term and long-term noise-level measurements were taken at representative locations within and in the vicinity of each campus where noise-sensitive land uses are currently located (**Tables 3.10-6** through **3.6-8**, and **Figures 3.10-1a** through **3.10-1c**). Noise measurements were conducted to document the current baseline of ambient noise levels at existing noise-sensitive land uses. Traffic noise in the Project vicinity was modeled using A.M. or P.M. peak-hour traffic volumes (whichever peak-hour involved higher traffic volumes) from the Project's transportation impact assessment

(refer to Section 3.14, *Transportation and Traffic*, and **Appendix E**, *Transportation and Traffic Calculations*) and the Federal Highway Administration (FHWA) Traffic Noise Model (Federal Highway Administration 2011).

Noise levels associated with Project-related demolition and construction activities are evaluated by summing the noise levels of the three loudest pieces of equipment that would operate on each campus. The expected list of construction equipment was determined in conjunction with Section 3.2, *Air Quality and Energy*, using the California Emissions Estimator Model and assumptions at each campus. The noise levels for each equipment type were identified at each campus based on the noise reference levels in FHWA's *Roadway Construction Noise Model User's Guide* (Federal Highway Administration 2006).

Vibration from construction equipment is evaluated using methods recommended by Caltrans and the Federal Transit Administration using source levels and criteria in **Tables 3.10-3** through **3.10-5** (Federal Transit Administration 2006; California Department of Transportation 2013).

3.10.3.2 Significance Criteria

The State CEQA Guidelines Appendix G (14 CCR 15000 et seq.) has identified significance criteria to be considered for determining whether a project could have significant impacts on existing noise.

An impact would be considered significant if construction or operation of the Project would have any of the following consequences.

- Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies.
- Expose persons to or generate excessive ground-borne vibration or ground-borne noise levels.
- Result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.
- Result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.
- Be located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the Project area to excessive noise levels.
- Be located in the vicinity of a private airstrip and expose people residing or working in the Project area to excessive noise levels.

3.10.3.3 Impacts and Mitigation Measures

Cañada College

Impact CC-NOI-1: Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies (less than significant with mitigation)

Construction

Construction noise at the Cañada College campus would be at the greatest intensity at Building 1, Kinesiology/Wellness, where the existing building would be demolished and a replacement building constructed, and at the site of the new Building 23, Math/Science/Engineering, where a new building would be constructed. Construction noise would also be generated during the expansions of Lots 6 and 10. Renovations and modernizations improvements at other locations on the campus would not require heavy-duty construction equipment and would not generate substantial noise.

Table 3.10-12 lists equipment that is likely to be used for demolition and construction. For each equipment type, the table shows the corresponding acoustical usage factor (the percentage of time the equipment is typically in operation) and maximum noise level (L_{max}) value at 50 feet.

Table 3.10-12. Typical Construction Noise Emission Levels

Equipment	Acoustical Use Factor	L_{max} at 50 Feet (dBA)
Backhoe	40%	78
Concrete mixer truck	40%	79
Concrete saw	20%	90
Crane	16%	81
Dozer	40%	82
Excavator	40%	81
Front end loader	40%	79
Generator	50%	81
Grader	40%	85
Paver	50%	77
Pneumatic Tools	50%	85
Impact pile driver	20%	101
Roller	20%	80
Welder	40%	74

Source: Federal Highway Administration 2006.
L_{max} = maximum sound level
dBA = A-weighted decibel

A reasonable worst-case noise level resulting from construction of the Project was evaluated by summing the noise levels of the three loudest pieces of equipment that would likely operate at the same time (concrete saw, pneumatic tools, and impact pile driver) using reference noise levels from the FHWA *Road Construction Noise Model User's Guide* (**Table 3.10-12**). The combined maximum noise level (L_{max}) and combined average noise level (L_{eq}) were determined to be 101 dBA and 95

dBA at 50 feet, respectively. This level of noise would be a conservative scenario, as it assumes that the three loudest equipment pieces would be operating in the same location simultaneously, which would be an unlikely event.

Table 3.10-13 shows the estimated sound levels from construction activities as a function of distance, based on calculated point-source attenuation over "soft" (i.e., acoustically absorptive) ground. The residences surrounding the campus are all located in the town of Woodside and Redwood City. The nearest noise-sensitive use to Project construction is a residence on Godetia Drive, approximately 125 feet north of Option 1 of Building 23, Math/Science/Engineering. There is substantial topography in the area that provides screening to some residences. The predicted construction noise level at this location is 85 dBA L_{eq} assuming no attenuation of sound from topographical shielding. The noise level at locations where there is shielding between the campus and a residence would lessen by as much as 5 to 10 dB. Construction could also result in elevated noise levels at on-campus buildings that are relatively sensitive to noise as well, such as classrooms or music facilities.

Table 3.10-13. Calculated Construction Noise Emission Levels at Cañada College

Distance between Source and Receiver (feet)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated L_{max} Sound Level (dBA)	Calculated L_{eq} Sound Level (dBA)
50	0	0.0	101	95
125	**-8**	**-2.0**	**91**	**85**
200	-12	-3.0	86	80
300	-16	-3.9	82	75
400	-18	-4.5	79	72
500	-20	-5.0	76	70
600	-22	-5.4	74	68
700	-23	-5.7	73	66
800	-24	-6.0	71	64
900	-25	-6.3	70	63
1,000	-26	-6.5	69	62
1,200	-28	-6.9	67	60
1,400	-29	-7.2	65	58
1,600	-30	-7.5	64	57
1,800	-31	-7.8	63	56
2,000	-32	-8.0	61	55
2,500	-34	-8.5	59	52
3,000	-36	-8.9	57	50

Note: Numbers in **bold** indicate the distance between the project boundary and the nearest sensitive land use.
dB = decibel
dBA = A-weighted decibel
L_{max} = maximum sound level
L_{eq} = combined average noise level

Activity within the Cañada College campus boundaries is not subject to City or County zoning policies. Nonetheless, the District uses County noise standards as its standard against which to judge the impact of the Project.

The results in **Table 3.10-13** indicate that construction activities have the potential to exceed the County's daytime exterior noise standard of 55 dBA within about 2,000 feet of construction activity and the nighttime noise standard of 50 dBA within 3,000 feet of construction activity. Residential areas in the vicinity of the construction areas in the northern and southern portions of the campus are within 2,000 feet of the construction sites. Consequently, there is a potentially significant impact from construction noise that occurs outside of hours exempt by the County. As discussed above the County limits construction to 7:00 a.m. to 6:00 p.m. on weekdays and 9:00 to 5:00 p.m. on Saturdays. The District intends to limit construction to the hours between 6:00 a.m. and 7:00 p.m. and to work on weekdays and weekends, if necessary. Accordingly, the Districts construction plan may not be consistent with local limits on hours of construction.

This would be a significant impact. With implementation of **Mitigation Measure CC-NOI-1**which would require the construction contractor to implement a number of noise-reduction measures, this impact would be less than significant.

Mitigation Measure CC-NOI-1: Employ noise-reducing construction practices at Cañada College

If construction work must be conducted between the hours of 6:00 p.m. and 7:00 a.m. weekdays, 5:00 p.m. and 9:00 a.m. on Saturdays, or at any time on Sundays, Thanksgiving and Christmas, the District will require the contractor to employ noise-reducing construction practices limit noise to be in compliance with the county noise standards specified in Table 3.10-1. Measures that can be used to limit noise include those listed below.

- Locating equipment as far as feasible from noise sensitive uses.
- Requiring that all construction equipment powered by gasoline or diesel engines have sound-control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation.
- Not allowing idling inactive construction equipment for prolonged periods (i.e., more than 2 minutes).
- Prohibiting gasoline or diesel engines from having unmuffled exhaust.
- Scheduling construction activities and material hauling that may affect traffic flow to off-peak hours and using routes that would affect the fewest number of people.
- Using noise-reducing enclosures around noise-generating equipment.
- Constructing temporary barriers between noise sources and noise-sensitive land uses or taking advantage of existing barrier features (terrain, structures) to block sound transmission.

Operation—Traffic

The new Building 1, Kinesiology/Wellness, which would replace the existing Building 1, Gymnasium, on the Cañada College campus would lead to a relatively minor increase in traffic in the vicinity of the campus. **Table 3.10-14** shows the existing, existing plus project, cumulative, and cumulative plus project peak-hour traffic volumes for eight roadway segments in the vicinity of Cañada College.

Table 3.10-14. Peak-Hour Traffic Volumes for Cañada College

Roadway	Segment	Existing Peak-Hour Volume	Existing + Project Peak-Hour Volume	Cumulative Peak-Hour Volume	Cumulative + Project Peak-Hour Volume
Farm Hill Boulevard	South of Woodhill Drive	1,729	1,774	1,800	1,845
Farm Hill Boulevard	Woodhill Drive to Woodleaf Avenue	1,636	1,679	1,703	1,746
Woodhill Drive	Farm Hill Boulevard to Woodleaf Avenue	58	59	61	62
Woodhill Drive	The Loop Road to Farm Hill Boulevard	647	736	674	763
Cañada Road	College Drive to Goodwin Drive	559	577	581	599
Cañada Road	North of College Drive	514	531	534	551
West Entry Drive	South of College Drive	107	142	111	146

Note: The values shown are the higher of either the AM or PM peak hour traffic volume and reflect the number of vehicle passages during that hour. Traffic noise was modeled using AM or PM peak-hour traffic volumes (whichever was higher).

Noise impacts associated with increased traffic volumes generated by the Project were evaluated for the existing condition, existing plus project condition, cumulative no project condition, and cumulative plus project condition, using a spreadsheet based on the FHWA traffic noise model (TNM). This spreadsheet calculates the traffic noise level at a fixed distance from the centerline of a roadway based on the peak-hour traffic volume, roadway speed, and vehicle mix that is predicted to occur under each condition.

The vehicle mix (i.e., the proportion of automobiles, trucks, buses, and other vehicles) for future and Project-related traffic was adjusted consistent with the existing conditions vehicle mix based on the traffic count data. Therefore, it was assumed that approximately 1% of the vehicles on the modeled segments would be heavy trucks. Posted vehicle speeds were used in the modeling. Where speeds were not posted, the speed recommended by the Project traffic engineer was used. Traffic noise was evaluated in terms of how Project-related traffic noise increases could affect existing noise-sensitive land uses along the analyzed seven segments.

As the modeling of the seven segments in the vicinity of the campus was conducted using peak-hour traffic volumes, the noise modeling resulted in 1-hour L_{EQ} values; the results were converted into approximate L_{dn} values based on trends apparent in the long-term, onsite noise measurements. Long-term 24-hour noise measurements were conducted near the campus as discussed in Section 3.10.2; in general, the peak-hour noise captured during the long-term measurement was between 0 and 2 dBA lower than the total L_{dn} for each 24-hour measurement. Therefore, the 1-hour L_{EQ} modeling results were conservatively converted into L_{dn} values by adding 2 dBA to each L_{EQ} result. Refer to **Table 3.10-15** for the noise modeling results, in L_{dn}, of the seven roadway segments analyzed.

Table 3.10-15. Traffic Noise Levels for Cañada College Roadway Segments

Existing vs. Existing + Project				
Roadway	Segment	Existing L_{dn} at 50 feet	Existing + Project L_{dn} at 50 feet	Difference (decibels)
Farm Hill Boulevard	South of Woodhill Drive	67.0	67.1	0.1
Farm Hill Boulevard	Woodhill Drive to Woodleaf Avenue	66.7	66.9	0.1
Woodhill Drive	Farm Hill Boulevard to Woodleaf Avenue	49.8	49.9	0.0
Woodhill Drive	The Loop Road to Farm Hill Boulevard	59.2	59.8	0.6
Cañada Road	College Drive to Goodwin Drive	62.1	62.3	0.1
Cañada Road	North of College Drive	61.7	61.8	0.1
West Entry Drive	South of College Drive	51.6	52.5	0.9
Cumulative vs. Cumulative + Project				
Roadway	Segment Location	Cumulative L_{dn} at 50 feet	Cumulative + Project L_{dn} at 50 feet	Difference (decibels)
Farm Hill Boulevard	South of Woodhill Drive	67.2	67.3	0.1
Farm Hill Boulevard	Woodhill Drive to Woodleaf Avenue	66.9	67.0	0.1
Woodhill Drive	Farm Hill Boulevard to Woodleaf Avenue	50.0	50.0	0.0
Woodhill Drive	The Loop Road to Farm Hill Boulevard	59.5	60.1	0.5
Cañada Road	College Drive to Goodwin Drive	62.3	62.4	0.1
Cañada Road	North of College Drive	61.9	62.1	0.2
West Entry Drive	South of College Drive	51.7	52.6	0.9

Notes:
Traffic noise was modeled using AM or PM peak-hour traffic volumes (whichever was higher).
Modeled 1-hour L_{EQ} values were conservatively converted into L_{dn} values by adding 2 dBA to each L_{EQ} result (based on trends in the 24-hour noise measurements).
L_{dn} = day-night level

Under existing conditions, Project-generated traffic was modeled to add between 0.0 and 0.9 dBA to the existing L_{dn} at a distance of 50 feet from the centerline of any of the modeled roadway segments. The Project-related traffic noise increase over existing conditions would be less than 3 dB, which is considered to be below the threshold of a perceptible change; therefore, the traffic noise impact would be less than significant. No mitigation is required.

Impact CC-NOI-2: Expose persons to or generate excessive ground-borne vibration or ground-borne noise levels (less than significant)

Because the Project would involve only demolition and reconstruction of an existing building, some modernization improvements, and new construction of one building, it would not result in an increase in the number of large trucks or add any sources of permanent, operational ground-borne vibration.

Construction of the Project at the Cañada College campus, however, may require impact tools or activities that are typically associated with substantial vibrational impacts, such as pile drivers, jackhammers, impact hammers, and earth compaction tools. The operation of heavy-duty

construction equipment could also generate localized groundborne vibration in the vicinity of the construction activity. As indicated in **Table 3.10-6,** distinctly perceptible vibration from pile driving is not expected to extend beyond about 175 feet from the activity.

As discussed in Section 3.10.2, *Environmental Setting*, there are existing residences located 100–150 feet from the potential site locations of the new Building 23, Math/Science/Engineering. As indicated in **Table 3.10-6**, vibration from non-impact equipment would not be perceptible at these distances. Vibration from pile driving could however fall in the range of *distinctly perceptible* to *strongly perceptible* at these distances. Vibration levels would be expected to be below thresholds for potential damage. Although vibration from pile driving may be intermittently perceptible at offsite locations, because of the low potential for damage to offsite structures, this impact would be less than significant. No mitigation is required.

On-campus buildings could be located within about 50 feet of construction activities and could be exposed to *strongly perceptible* to *severe* levels of ground vibration from pile driving. The potential for damage is greater than at offsite structures as well but vibration from pile driving is not expected to exceed the damage potential thresholds of 0.5 inch/second that is associated with modern industrial/commercial buildings and new residential structures. This impact is, therefore, less than significant. No mitigation is required.

Impact CC-NOI-3: Result in a permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project (less than significant)

Traffic Noise

The Project would result in a permanent increase in traffic noise along some roadways in the Project vicinity (**Table 3.10-15**). However, as discussed in Impact CC-NOI-1, Project-generated traffic is predicted to add between 0.0 and 0.9 dBA to the existing L_{dn} at a distance of 50 feet from the centerline of any of the seven modeled roadway segments for Cañada College. As the Project-related traffic noise increase over existing conditions would be less than 3 dB (i.e., below the threshold of a perceptible change), this permanent increase is not considered to be substantial. This traffic noise impact would be less than significant. No mitigation is required.

Non-Transportation Noise

Permanent non-transportation noise sources from the Project would be limited to HVAC units, ventilation fans, and cooling equipment. The Project applicant has confirmed that all stationary building sources of noise would be acoustically enclosed and that all proposed equipment would be acoustically enclosed. Because all noise generating building equipment will be enclosed, substantially reducing noise from these sources, the Project would not result in a substantial, permanent increase in ambient noise levels at sensitive land uses. This impact would be less than significant. No mitigation is required.

Impact CC-NOI-4: Result in a temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project (less than significant with mitigation)

As discussed in Impact CC-NOI-1, construction of the Project would result in an increase in ambient noise levels at surrounding residences near the construction areas. The increase in noise would be temporary, ending when construction is completed. The temporary increase in ambient noise at surrounding residences would exceed the County's noise limits for construction that occurs before 7:00 a.m., after 6:00 p.m., and on weekends. With implementation of **Mitigation Measure CC-**

NOI-1, which would reduce the temporary increase in ambient noise levels from construction during the non-exempt hours by requiring the construction contractor to implement noise-reducing construction practices, this impact would be less than significant.

Mitigation Measure CC-NOI-1: Employ noise-reducing construction practices at Cañada College

This measure is described under Impact CC-NOI-1.

Impact CC-NOI-5: Be located within an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the Project area to excessive noise levels (no impact)

The Cañada College campus is not located within 2 miles of a public airport. In addition, the Project would not result in additional people exposed to excessive noise levels because no new land uses are being added at the campus. There would be no impact.

Impact CC-NOI-6: Be located in the vicinity of a private airstrip and expose people residing or working in the Project area to excessive noise levels (no impact)

The Cañada College campus is not located in the vicinity of a private airstrip. In addition, the Project would not result in additional people exposed to excessive noise levels because no new land uses are being added at the campus. There would be no impact.

College of San Mateo

Impact CSM-NOI-1: Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies (less than significant with mitigation)

Construction

Construction noise at the CSM campus would be at the greatest intensity at Building 8, Gymnasium; Building 12, East Hall; and Building 19, Emerging Technologies, where the existing buildings would be demolished and new buildings would be constructed, and at the Corporation Yard, where grading and paving would be required. Renovations and modernizations improvements at other locations on the campus could require heavy-duty construction equipment, but that activity would be primarily located inside existing buildings. The installation of solar panels in Lots 1, 2, and 9 would result in noise, but this activity would not likely require the use of heavy-duty construction equipment for a substantial amount of time.

Table 3.10-16 lists equipment that is likely to be used for demolition and construction. For each equipment type, the table shows the corresponding acoustical usage factor (the percentage of time the equipment is typically in operation) and L_{max} value at 50 feet.

A reasonable worst-case noise level resulting from construction of the Project at the CSM campus was evaluated by summing the noise levels of the three loudest pieces of equipment that would likely operate at the same time (concrete saw, pneumatic tools, and grader). The combined maximum noise level (L_{max}) and combined average noise level (L_{eq}) were determined to be 91 dBA and 85 dBA at 50 feet, respectively. This level of noise would be a conservative scenario, as it assumes that the three loudest equipment pieces would be operating in the same location simultaneously, which would be an unlikely event.

Table 3.10-16. Typical Construction Noise Emission Levels

Equipment	Acoustical Use Factor	L_{max} at 50 Feet (dBA)
Backhoe	40%	78
Concrete mixer truck	40%	79
Concrete saw	20%	90
Crane	16%	81
Dozer	40%	82
Excavator	40%	81
Front end loader	40%	79
Generator	50%	81
Grader	40%	85
Paver	50%	77
Pneumatic Tools	50%	85
Roller	20%	80
Welder	40%	74

Source: Federal Highway Administration 2006.
L_{max} = maximum sound level
dBA = A-weighted decibel

Table 3.10-17 shows the estimated sound levels from construction activities as a function of distance, based on calculated point-source attenuation over "soft" (i.e., acoustically absorptive) ground. At the nearest sensitive land use from the Gymnasium—the Serendipity School, which is approximately 700 feet south of the building—L_{eq} noise from construction would be 58 dBA. This level of construction noise would be lower than the L_{dn} value of 61.4 measured at this location (see **Table 3.10-10**). The nearest sensitive land uses from the Corporation Yard are residences located on Tobin Clark Drive, approximately 150 feet northeast of the Corporation Yard. Noise from construction at the nearest residence would be 75 dBA L_{eq} as a worst case scenario.

Although activity within the CSM campus boundaries is not subject to city or county zoning policies, where practicable, the District uses San Mateo County noise standards for the purposes of assessing construction noise impacts. The results in **Table 3.10-17** indicate that construction activities have the potential to exceed the County's daytime exterior noise standard of 55 dBA within about 900 feet of construction activity and the nighttime noise standard of 50 dBA within 1,500 feet of construction activity. Residential areas are within 900 feet of the construction sites at the Corporation Yard and Building 19, Center for Innovation and Emerging Technologies. The Serendipity School is within 900 feet of Building 8, Gymnasium. Accordingly, there is a potentially significant impact from construction noise that occurs outside of hours exempt by the County. The Project is generally consistent with County regulations, however some construction may need to occur before 6:00 a.m. and after 7:00 p.m. and within reduced hours on weekends to minimize disruption to college operations.

With implementation of **Mitigation Measure CSM-NOI-1** the construction contractor would be required to implement a number of noise-reduction measures. This impact would be less than significant.

Mitigation Measure CSM-NOI-1: Employ noise-reducing construction practices at the College of San Mateo

This measure is the same as Mitigation Measure CC-NOI-1, described under Impact CC-NOI-1, but would be implemented at the College of San Mateo.

Table 3.10-17. Calculated Construction Noise Emission Levels at College of San Mateo

Distance between Source and Receiver (feet)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated L_{max} Sound Level (dBA)	Calculated L_{eq} Sound Level (dBA)
50	0	0.0	92	87
150	**-10**	**-2.4**	**80**	**75**
200	-12	-3.0	77	72
300	-16	-3.9	73	67
400	-18	-4.5	70	64
500	-20	-5.0	67	62
600	-22	-5.4	65	60
700	**-23**	**-5.7**	**63**	**58**
800	-24	-6.0	62	57
900	-25	-6.3	61	55
1,000	-26	-6.5	60	54
1,200	-28	-6.9	58	52
1,400	-29	-7.2	56	51
1,600	-30	-7.5	54	49
1,800	-31	-7.8	53	48
2,000	-32	-8.0	52	47
2,500	-34	-8.5	50	44
3,000	-36	-8.9	48	42

Note: Numbers in **bold** indicate the distance between the project boundary and the nearest sensitive land use.
dB = decibel
dBA = A-weighted decibel
L_{max} = maximum sound level
L_{eq} = combined average noise level

Operation—Traffic

As the Project objective is to better serve approximately the same number of current students and staff at each campus, and as the construction associated with CSM is not anticipated to increase traffic in the vicinity of the school, the Project would not expose persons to or generate noise levels in excess of relevant standards. This impact would be less than significant. No mitigation is required.

Impact CSM-NOI-2: Expose persons to or generate excessive ground-borne vibration or ground-borne noise levels (less than significant)

Because the Project would only involve demolition and reconstruction of an existing building and some modernization improvements, it would not result in an increase in large trucks or add any sources of permanent, operational groundborne vibration.

Construction of the Project at the CSM campus, however, may require impact tools or activities that are typically associated with substantial vibrational impacts, such as pile drivers, jackhammers, impact hammers, and earth compaction tools. The operation of heavy-duty construction equipment

could also generate localized groundborne vibration in the vicinity of construction activity, however. As indicated in **Table 3.10-6**, distinctly perceptible vibration from pile driving is not expected extend beyond about 175 feet from the activity.

As discussed in Section 3.10.2, *Environmental Setting*, the nearest existing sensitive land use to where heavy duty construction equipment would be located is approximately 700 feet from Building 8, Gymnasium, and Building 19, Center for Innovation and Emerging Technologies. At this distance, vibration levels from any construction equipment would not perceptible and would be below damage potential thresholds. Thus, existing sensitive land uses would not be subject to excessive groundborne vibration or groundborne noise levels. This impact would be less than significant. No mitigation is required.

On-campus buildings could be located within 50 feet of construction activities and could be exposed to "strongly perceptible" to "severe" level of ground vibration from pile driving. Vibration from pile driving is not expected to exceed the damage potential threshold of 0.5 inches/second that is associated with "modern industrial/commercial buildings" and "new residential structures." This impact is therefore less than significant. No mitigation is required.

Impact CSM-NOI-3: Result in a permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project (less than significant)

Traffic Noise

As discussed in Impact CSM-NOI-1, the construction associated with CSM would not be anticipated to increase traffic in the vicinity of the campus. Impacts related to traffic noise for CSM would be less than significant. No mitigation is required.

Non-Transportation Noise

Permanent non-transportation noise sources from the Project would be limited to HVAC units, ventilation fans, and cooling equipment. The Project applicant has confirmed that all stationary building sources of noise would be acoustically enclosed, and that all proposed equipment would be acoustically enclosed. Because all noise generating building equipment would be enclosed, substantially reducing noise from these sources, the Project would not result in a substantial permanent increase in ambient noise levels at sensitive land uses. This impact would be less than significant. No mitigation is required.

Impact CSM-NOI-4: Result in a temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project (less than significant with mitigation)

As discussed in Impact CSM-NOI-1, construction of the Project would result in an increase in ambient noise levels at surrounding residences near the construction areas. The increase in noise would be temporary, ending when construction is completed. The temporary increase in ambient noise at surrounding residences and the Serendipity School would exceed the County's noise limits for construction that occurs before 7:00 a.m., after 6:00 p.m., and on weekends.

With implementation of **Mitigation Measure CSM-NOI-1**, which would reduce the temporary increase in ambient noise levels from construction during the non-exempt hours by requiring the construction contractor to implement noise-reducing construction practices, this impact would be less than significant.

Mitigation Measure CSM-NOI-1: Employ noise-reducing construction practices at the College of San Mateo

This measure is described under Impact CSM-NOI-1.

Impact CSM-NOI-5: Be located within an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the Project area to excessive noise levels (no impact)

The CSM campus is not located within 2 miles of a public airport. In addition, the Project would not result in additional people exposed to excessive noise levels because no new land uses are being added at the campus. There would be no impact.

Impact CSM-NOI-6: Be located in the vicinity of a private airstrip and expose people residing or working in the Project area to excessive noise levels (no impact)

The CSM campus is not located in the vicinity of a private airstrip. In addition, the Project would not result in additional people exposed to excessive noise levels because no new land uses are being added at the campus. There would be no impact.

Skyline College

Impact SC-NOI-1: Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies (less than significant with mitigation)

Construction

Construction noise at the Skyline College campus would be at the greatest intensity in the central and western area of the campus, where three new buildings would be constructed. These areas of the campus are located far from any existing off-campus sensitive land uses but could result in elevated noise levels at on-campus buildings that are relatively sensitive to noise, such as classrooms or music facilities. Construction activity would also occur at the northern part of the campus, where Building 15, Career and Sustainable Technology, would be constructed and Lot L would be expanded, and at the southeastern side of the campus, where a potential housing development would be constructed. Renovations and modernizations improvements at other locations on the campus would not require heavy-duty construction equipment and would not generate substantial noise.

Table 3.10-18 lists equipment that is likely to be used for demolition and construction. For each equipment type, the table shows the corresponding acoustical usage factor (the percentage of time the equipment is typically in operation) and L_{max} value at 50 feet.

A reasonable worst-case noise level resulting from construction of the Project at the Skyline College campus was evaluated by summing the noise levels of the three loudest pieces of equipment that would likely operate at the same time (concrete saw, pneumatic tools, and grader). The combined maximum noise level (L_{max}) and combined average noise level (L_{eq}) were determined to be 91 dBA and 85 dBA at 50 feet, respectively. This level of noise would be a conservative scenario, as it assumes that the three loudest equipment pieces would be operating in the same location simultaneously, which would be an unlikely event.

Table 3.10-18. Typical Construction Noise Emission Levels

Equipment	Acoustical Use Factor	L_{max} at 50 Feet (dBA)
Backhoe	40%	78
Concrete mixer truck	40%	79
Concrete saw	20%	90
Crane	16%	81
Dozer	40%	82
Excavator	40%	81
Front end loader	40%	79
Generator	50%	81
Grader	40%	85
Paver	50%	77
Pneumatic Tools	50%	85
Roller	20%	80
Welder	40%	74

Source: Federal Highway Administration 2006.
L_{max} = maximum sound level
dBA = A-weighted decibel

Construction activity could occur at a distance of 50 feet from existing residences north of the expansion construction activities in Lot L. In addition, construction activities at the proposed housing development on Surplus Parcel B could occur at a distance of 100 feet from existing residences surrounding the parcel. Noise levels at these distances are shown in **Table 3.10-19**, which shows the estimated sound levels from construction activities as a function of distance, based on calculated point-source attenuation over "soft" (i.e., acoustically absorptive) ground.

Activity within the Skyline College campus boundaries is not subject to city or county zoning policies, where practicable the District uses San Mateo County noise standards for the purposes of assessing construction noise impacts, except where the residential component of a project is being proposed in San Bruno. The results in **Table 3.10-19** indicate that construction activities have the potential to exceed the County's daytime exterior noise standard of 55 dBA within about 900 feet of construction activity and the nighttime noise standard of 50 dBA within 1,500 feet of construction activity.

Residential areas and a child development center are within 900 feet of the construction site at Lot L. Residences are also located within 900 feet of the potential housing development site (Surplus Parcel B). Accordingly, there is a potentially significant impact from construction noise that occurs outside of hours exempt by the County. The Project is generally consistent with County regulations; however, some construction may need to occur before 7:00 a.m. and after 6:00 p.m., and on weekends to minimize disruption to college operations. With implementation of **Mitigation Measure SC-NOI-1**, the construction contractor would be required to implement a number of noise-reduction measures, and this impact would be less than significant.

Mitigation Measure SC-NOI-1: Employ noise-reducing construction practices at Skyline College

This measure is the same as Mitigation Measure CC-NOI-1, described under Impact CC-NOI-1, but would be implemented at Skyline College.

Table 3.10-19. Calculated Construction Noise Emission Levels at Skyline College

Distance between Source and Receiver (feet)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated L_{max} Sound Level (dBA)	Calculated L_{eq} Sound Level (dBA)
50	**0**	**0.0**	**92**	**87**
100	**-6**	**-1.5**	**85**	**79**
200	-12	-3.0	77	72
300	-16	-3.9	73	67
400	-18	-4.5	70	64
500	-20	-5.0	67	62
600	-22	-5.4	65	60
700	**-23**	**-5.7**	**63**	**58**
800	-24	-6.0	62	57
900	-25	-6.3	61	55
1,000	-26	-6.5	60	54
1,200	-28	-6.9	58	52
1,400	-29	-7.2	56	51
1,600	-30	-7.5	54	49
1,800	-31	-7.8	53	48
2,000	-32	-8.0	52	47
2,500	-34	-8.5	50	44
3,000	-36	-8.9	48	42

Note: Numbers in **bold** indicate the distance between the project boundary and the nearest sensitive land use.
dB = decibel
dBA = A-weighted decibel
L_{max} = maximum sound level
L_{eq} = combined average noise level

Land Use Compatibility for New Residences

The new housing development at the Skyline College campus would be subject to the land use compatibility standards in the San Bruno General Plan Health and Safety Element. Noise was measured at the site of the future housing development (Surplus Parcel B)(**Table 3.10-11**) at a level of 61.5 dBA L_{dn}. Additionally, modeling of the existing plus project condition along the roadway segment closest to the proposed housing development (College Drive between College Road and Sheryl Drive) yielded existing plus project noise levels of approximately 61.8 L_{dn} at a distance of 50 feet from the centerline of the roadway. However, according to the current Project plans, the proposed residential development would be located at least 75 feet from the centerline of this roadway. At a distance of 75 feet, the noise level at along this roadway segment was modeled to be approximately 59.9 L_{dn}.

According to the land use compatibility standards, single- and multi-family residences are considered to be conditionally acceptable and normally acceptable, respectively, at these noise levels. The San Bruno General Plan specifies that land uses that are conditionally acceptable should be constructed only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Because the noise exposure of the housing development at Skyline

College would be conditionally acceptable, this impact would be significant. With implementation of **Mitigation Measure SC-NOI-2**, the District would be required to prepare a detailed analysis of and implement the noise reduction requirements needed to reduce outdoor noise to an interior level of 45 dBA in any habitable room; consequently, this impact would be less than significant.

Operation—Traffic

The addition of the residential development at the Skyline College site would lead to a relatively minor increase in traffic in the vicinity of the campus. **Table 3.10-20** shows the existing, existing plus project, cumulative, and cumulative plus project peak-hour traffic volumes for eight roadway segments in the vicinity of Skyline College.

Table 3.10-20. Peak-Hour Traffic Volumes for Skyline College

Roadway	Segment	Existing Peak-Hour Volume	Existing + Project Peak-Hour Volume	Cumulative Peak-Hour Volume	Cumulative + Project Peak-Hour Volume
College Drive	College Road to Sheryl Drive	696	737	739	780
College Drive	Sheryl Drive to Susan Drive	903	944	959	1,000
College Drive	Susan Drive to Skyline Boulevard	1,005	1,046	1,067	1,108
Sheryl Drive	Fasman Drive to College Drive	114	114	121	121
Allen Drive	College Drive to Goodwin Drive	133	133	141	141
Skyline Boulevard	North of College Drive	2,660	2,677	2,825	2,842
Skyline Boulevard	South of College Drive	2,749	2,773	2,918	2,942
Skyline Boulevard	Skyline Boulevard to Fleetwood Drive	260	260	276	276

Notes:
The values shown are the higher of either the AM or PM peak hour volume. Traffic noise was modeled using A.M. or PM peak-hour traffic volumes (whichever was higher).

As discussed for Cañada College, noise impacts associated with increased traffic volumes generated by the Project were evaluated for the existing condition, existing plus project condition, cumulative no project condition, and cumulative plus project condition. Peak-hour traffic volumes for each modeled segment are shown in **Table 3.10-20**. As with the analysis for Cañada College, the vehicle mix for future and project-related traffic was adjusted based on the traffic count data; it was therefore assumed that approximately 1% of the vehicles on the modeled segments would be heavy traffic/trucks. Posted vehicle speeds were used in the modeling. Where speeds were not posted, the speed recommended by the Project traffic engineer was used. Traffic noise was evaluated in terms of how Project-related traffic noise increases could affect existing noise-sensitive land uses along the analyzed eight segments.

The modeling of the eight segments in the vicinity of the Project site was conducted using peak-hour traffic volumes, so the noise modeling resulted in one-hour L_{EQ} values. As discussed for the analysis of Cañada College, the results were converted into approximate L_{dn} values based on trends apparent in the long-term, onsite noise measurements; the one-hour L_{EQ} modeling results were conservatively converted into L_{dn} values by adding 2 dBA to each L_{EQ} result. Refer to **Table 3.10-21** for noise modeling results, in L_{dn}, for the eight roadway segments analyzed.

Table 3.10-21. Traffic Noise Levels for Skyline College Roadway Segments

Existing vs. Existing + Project				
Roadway	Segment	Existing L_{dn} at 50 feet	Existing + Project L_{dn} at 50 feet	Difference (decibels)
College Drive	College Road to Sheryl Drive	61.6	61.8	0.2
College Drive	Sheryl Drive to Susan Drive	64.5	64.6	0.2
College Drive	Susan Drive to Skyline Boulevard	64.9	65.1	0.1
Sheryl Drive	Fasman Drive to College Drive	53.8	53.8	0.0
Allen Drive	College Drive to Goodwin Drive	54.3	54.3	0.0
Skyline Boulevard	North of College Drive	75.5	75.5	0.0
Skyline Boulevard	South of College Drive	75.6	75.6	0.0
Berkshire Drive	Skyline Boulevard to Fleetwood Drive	57.6	57.6	0.0
Cumulative vs. Cumulative + Project				
Roadway	Segment Location	Cumulative L_{dn} at 50 feet	Cumulative + Project L_{dn} at 50 feet	Difference (decibels)
College Drive	College Road to Sheryl Drive	61.8	62.2	0.3
College Drive	Sheryl Drive to Susan Drive	64.8	64.9	0.1
College Drive	Susan Drive to Skyline Boulevard	65.2	65.3	0.1
Sheryl Drive	Fasman Drive to College Drive	53.9	53.9	0.0
Allen Drive	College Drive to Goodwin Drive	54.4	54.4	0.0
Skyline Boulevard	North of College Drive	75.7	75.7	0.0
Skyline Boulevard	South of College Drive	75.9	75.9	0.0
Berkshire Drive	Skyline Boulevard to Fleetwood Drive	57.8	57.8	0.0

Notes:
Traffic noise was modeled using AM or PM peak-hour traffic volumes (whichever was higher).
Modeled one-hour L_{EQ} values were conservatively converted into L_{dn} values by adding 2 dBA to each L_{EQ} result (based on trends in the 24-hour noise measurements).

For existing conditions, Project-generated traffic was modeled to add between 0.0 and 0.2 dBA to the existing L_{dn} at a distance of 50 feet from the centerline of any of the modeled roadway segments. As the Project-related traffic noise increase over existing conditions would be less than 3 dB, which is considered to be below the threshold of a perceptible change, the traffic noise impact would be less than significant.

Mitigation Measure SC-NOI-2: Prepare a detailed noise reduction analysis at the potential housing development at Skyline College

Prior to issuance of building permits, the District will prepare a detailed analysis of the noise reduction requirements that are needed to reduce outdoor noise to an interior level of 45 dBA in any habitable room. The results of this analysis will be summarized in a report and submitted to

the City of San Bruno for review and approval. Upon approval, the District will take the actions necessary to ensure that the recommendations of the report are incorporated into the design and construction specifications of the residential development on Surplus Parcel B.

Impact SC-NOI-2: Expose persons to or generate excessive ground-borne vibration or ground-borne noise levels (less than significant)

Because the Project would involve new construction of educational land uses and some modernization improvements, there would not be a measurable increase in large trucks or any sources of permanent, operational ground-borne vibration.

Construction of the Project at the Skyline College campus, however, may require impact tools or activities that are typically associated with substantial vibrational impacts, such as pile drivers, jackhammers, impact hammers, and earth compaction tools. The operation of heavy-duty construction equipment could also generate localized groundborne vibration in the vicinity of the construction site. As indicated in **Table 3.10-6** distinctly perceptible vibration from pile driving is not expected to extend beyond about 175 feet from the activity.

The nearest off-campus sensitive land uses to where construction would occur are the residences at the northern side of the campus. The demolition of Building 19 and expansion of Lot L would result in construction occurring within approximately 75 feet of the residents north of the campus. Residences adjacent to Surplus Parcel B would also be located approximately 75 feet from construction. As indicated in **Table 3.10-6**, vibration from non-impact equipment would be barely perceptible at this distance. Vibration from pile driving could however fall in the range of *strongly perceptible* to *severe*. Vibration levels would be expected to be below the damage potential threshold of 0.3 inch/second for older residential structures. Although vibration from pile driving may be intermittently perceptible at offsite locations, there is low potential for damage to offsite structures, and this impact would be less than significant. No mitigation is required.

On-campus buildings could be located within about 50 feet of construction activities and could be exposed to *strongly perceptible* to *severe* levels of ground vibration from pile driving. The potential for damage is greater than at offsite structures as well but vibration from pile driving is not expected to exceed the damage potential threshold of 0.5 inch/second that is associated with modern industrial/commercial buildings and new residential structures. This impact is, therefore, less than significant. No mitigation is required.

Impact SC-NOI-3: Result in a permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project (less than significant)

Traffic Noise

The Project would result in a permanent increase in traffic noise along some roadways in the Project vicinity (**Table 3.10-21**). As discussed in Impact SC-NOI-1, Project-generated traffic is predicted to add between 0.0 and 0.2 dBA to the existing L_{dn} at a distance of 50 feet from the centerline of any of the modeled roadway segments. As the Project-related traffic noise increase over existing conditions would be less than 3 dB (i.e., below the threshold of a perceptible change), this permanent increase is not considered to be substantial. Therefore, this traffic noise impact would be less than significant. No mitigation is required.

Non-Transportation Noise

Permanent non-transportation noise sources from the Project would be limited to HVAC units, ventilation fans, and cooling equipment. The Project applicant has confirmed that all stationary building sources of noise would be acoustically enclosed and that all proposed equipment would be acoustically enclosed. Because all noise-generating building equipment would be enclosed, substantially reducing noise from these sources, the Project would not result in a substantial permanent increase in ambient noise levels at sensitive land uses. This impact would be less than significant. No mitigation is required.

Impact SC-NOI-4: Result in a temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project (less than significant with mitigation)

As discussed in Impact SC-NOI-4, construction of the Project would result in an increase in ambient noise levels at surrounding residences near the construction areas. The increase in noise would be temporary, ending when construction is completed. The temporary increase in ambient noise at surrounding residences would exceed the County's noise limits for construction that occurs before 7:00 a.m., after 6:00 p.m., and on weekends.

With implementation of **Mitigation Measure SC-NOI-1**, which would reduce the temporary increase in ambient noise levels from construction during the non-exempt hours by requiring the construction contractor to implement noise-reducing construction practices, this impact would be less than significant.

Mitigation Measure SC-NOI-1: Employ noise-reducing construction practices at Skyline College

This measure is described under Impact SC-NOI-1.

Impact SC-NOI-5: Be located within an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the Project area to excessive noise levels (no impact)

The Skyline College campus is not located within 2 miles of a public airport. The campus is located approximately 3.5 miles from San Francisco International Airport (SFO), but it is not located within the CNEL 65 dBA noise contour of the airport. The land use plan for SFO considers the 65 dBA noise contour to be an area where noise from the airport would be substantial enough to make land use compatibility a necessary consideration (City/County Association of Governments of San Mateo County 2012). Because the Project is not within this area, the people residing and working in the Project area, including at those residences proposed as part of the Project, would not be exposed to excessive airport noise levels. There would be no impact.

Impact SC-NOI-6: Be located in the vicinity of a private airstrip and expose people residing or working in the Project area to excessive noise levels (no impact)

The Skyline College campus is not located in the vicinity of a private airstrip; thus, the Project would not expose people residing or working in the campus area to excessive aircraft noise levels. There would be no impact.

3.10.3.4 Cumulative Impacts

Cumulative impacts are examined using the plan/program approach. The general plans for Redwood City, Woodside, San Mateo, and San Bruno provide for future development in the vicinity of the colleges. The potential for cumulative noise impacts was analyzed on the basis of the planned uses reflected in the general plans.

Cañada College

Cumulative development in the Project vicinity would not result in the exposure of people to a substantial temporary increase in ambient noise level during construction due to the localized nature of construction noise impacts because noise diminishes rapidly with distance (6 dBA per doubling of distance for point and stationary sources). It is not likely that residents affected by construction of the Project would be simultaneously affected by noise from other development in the area.

As discussed for Impact CC-NOI-1, the Project would not generate a substantial number of new vehicle trips in the vicinity of the Cañada College campus. As shown in the modeling results for the cumulative condition presented in **Table 3.10-15**, and similar to the existing condition modeling results presented in the same table, Project-generated traffic would add an estimated 0.0 to 0.9 dBA to the cumulative (without project) condition L_{dn} at a distance of 50 feet from the centerline of the seven modeled roadway segments. The Project-related traffic noise increase over cumulative without project conditions would be less than 3 dB, which is considered to be below the threshold of a perceptible change. Therefore, the Project does not have a considerable contribution to a significant cumulative impact on traffic noise. No mitigation is required.

College of San Mateo

Cumulative development in the Project vicinity would not result in the exposure of people to a substantial temporary increase in ambient noise level during construction due to the localized nature of construction noise impacts because noise diminishes rapidly with distance (6 dBA per doubling of distance for point and stationary sources). It is not likely that residents affected by construction of the project would be simultaneously affected by noise from other development in the area.

As discussed for Impact CSM-NOI-1, the construction associated with CSM would not be anticipated to increase traffic in the vicinity of the campus; as the project would not increase traffic in the vicinity of the campus, the Project would not contribute to a cumulative traffic noise impact. The cumulative traffic noise contribution is considered less than considerable. No mitigation is be required.

Skyline College

Cumulative development in the Project vicinity would not result in the exposure of people to a substantial temporary increase in ambient noise level during construction due to the localized nature of construction noise impacts because noise diminishes rapidly with distance (6 dBA per doubling of distance for point and stationary sources). It is not likely that residents affected by construction of the Project would be simultaneously affected by noise from other development in the area.

As discussed for Impact SC-NOI-1, the Project would not generate a substantial number of new vehicle trips in the vicinity of the Skyline College campus. As shown in the modeling results for the cumulative condition presented in **Table 3.10-21**, and similar to the existing condition modeling results presented in the same table, Project-generated traffic would add an estimated 0.0 to 0.3 dBA to the cumulative condition L_{dn} at a distance of 50 feet from the centerline of the eight modeled roadway segments. As the Project-related traffic noise increase over cumulative without project conditions would be less than 3 dB, which is considered to be below the threshold of a perceptible change, the cumulative traffic noise impact is considered less than significant. No mitigation would be required.

3.11 Population and Housing

This section describes the regulatory and environmental setting for population and housing. It also describes impacts on population and housing that would result from implementation of the Project and mitigation for significant impacts, where feasible and appropriate.

3.11.1 Regulatory Setting

The following regulations are relevant to population and housing and apply to implementation of the Project on all three campuses, unless otherwise specified.

3.11.1.1 Federal

There are no relevant federal regulations for population and housing applicable to the Project.

3.11.1.2 State

There are no relevant state regulations for population and housing other than the California Department of Housing and Community Development's (HCD) Regional Housing Needs Allocation (RHNA), which is discussed in Section 3.11.1.3 under *Association of Bay Area Governments Regional Housing Needs Allocation*.

3.11.1.3 Local

As stated in Section 2.6 of Chapter 2, *Project Description*, the District is exempt from the application of city and county zoning ordinances, except the proposed residential complex at Skyline College because it is a non-educational use. However, the current zoning and applicable general plan provisions for each campus are provided for informational purposes.

Association of Bay Area Governments Regional Housing Needs Allocation

The RHNA process addresses the need for housing across a range of incomes and in all communities throughout the state. To ensure that adequate housing is available for all income groups, HCD is responsible for determining this regional need in coordination with the Association of Bay Area Governments (ABAG). ABAG is required to distribute the region's share of statewide need to the cities and counties within its jurisdiction.

The purpose of the RHNA is to allocate to cities and counties their "fair share" of the San Francisco Bay Area's projected housing need by household income groups, which are categorized as *very low*, *low*, *moderate*, and *above moderate*.

Redwood City General Plan

There are no relevant Redwood City General Plan policies or regulations for population and housing applicable to the Project.

Town of Woodside General Plan

There are no relevant Woodside General Plan policies or regulations for population and housing applicable to the Project.

City of San Mateo General Plan

There are no relevant San Mateo General Plan policies or regulations for population and housing applicable to the Project.

City of San Bruno General Plan

The San Bruno General Plan contains goals and policies related to population and housing. The policies related to population and housing applicable to the residential complex at Skyline College are listed below. For a more comprehensive consistency analysis with general plan goals and policies, refer to **Table 3.9-2** in Section 3.9, *Land Use and Planning*.

> **Policy LUD 5:** Allow small-lot single family housing in new and existing neighborhoods to serve as efficient and compact infill development.
>
> **Policy LUD 7:** Require any subdivision or development involving construction of more than five units, regardless of the number of parcels, to undergo design review. Require provision of open spaces and pedestrian connections with multifamily projects, as well as an active street frontage along arterial roadways.

The San Bruno Housing Element 2015–2023 identifies specific opportunity sites for development or redevelopment of mixed-use or residential projects that are counted towards the City's RHNA obligation. Figure 4.4-1 of the Housing Element identifies the entire Skyline College campus as a housing opportunity site.

Further, the Housing Element includes plans and policies to address the housing needs in San Bruno. The relevant policy applicable to the residential complex at Skyline College is listed below. For a more comprehensive consistency analysis with the Housing Element goals and policies, refer to **Table 3.9-2** in Section 3.9, *Land Use and Planning*.

> **Program 2-C**: Support identified housing opportunities. Work with property owners and the community to support and encourage the redevelopment of identified opportunity sites into mixed uses with affordable housing components.

3.11.2 Environmental Setting

Since the college campuses opened in 1968 (Cañada College), 1963 (College of San Mateo [CSM]), and 1969 (Skyline College), the combined student population of the three colleges in the District has fluctuated between about 22,000 and 34,000 students per year. Enrollment at community colleges typically fluctuates within a relatively narrow margin in response to changes in adult population, the economy, and the level of student fees. The enrollment at the colleges has fluctuated within a narrow range for the last 45 years, and this trend is expected to continue. The District does not have plans for or anticipate significant growth in student enrollment in the near future. Additionally, San Mateo is considered a low-growth county; much of the county is designated open space, which limits opportunity for growth.

The environmental setting for each of the three college campuses is presented below. Because the Project includes the proposed residential complex at Skyline College, the environmental setting for Skyline College presents the existing conditions related to population and housing within San Bruno.

3.11.2.1 Cañada College

The student population for Cañada College has fluctuated between 4,000 and 9,000 per year since the college opened in Fall 1968. Cañada College comprises approximately 26% of Districtwide enrollment, with a total of 6,908 students in Fall 2014 (San Mateo County Community College District 2013).

The campus includes existing housing for faculty and staff onsite. Cañada Vista, a 60-unit multi-family rental housing development for faculty and staff, is located in the eastern part of campus north of The Loop Road (refer to **Figure 2-2**).

3.11.2.2 College of San Mateo

The student population for CSM has fluctuated between 10,000 and 18,000 per year since the college opened in 1963. CSM comprises approximately 36% of Districtwide enrollment, with a total of 9,629 students in fall 2014 (San Mateo County Community College District 2013).

The campus includes existing housing for faculty and staff onsite. College Vista, a 44-unit rental housing development for faculty and staff, is located in the southwestern part of campus near the campus border and adjacent residential neighborhood (refer to **Figure 2-3**).

3.11.2.3 Skyline College

Skyline College Student Population

The student population for Skyline College has fluctuated between 3,000 and 10,000 per year since the college opened in 1969. Skyline College comprises approximately 38% of Districtwide enrollment, with a total of 10,309 students in fall 2014 (San Mateo County Community College District 2013).

The campus does not include existing housing for students or faculty. There are residences adjacent to the campus.

San Bruno Population

The January 2015 population of San Bruno is approximately 44,409 (California Department of Finance 2015). Between 2015 and 2035, the city's population is expected to increase approximately 21% to 53,900, with an average growth of approximately 5% every 5 years. **Table 3.11-1** presents the anticipated population growth for San Bruno.

Table 3.11-1. San Bruno Population Growth Projections 2015–2035

	2015	2020	2025	2030	2035
Population	44,409	45,900	48,400	51,100	53,900

Source: California Department of Finance 2015; Association of Bay Area Governments 2013a.

San Bruno Housing

Housing Units

In January 2015, there were 16,049 housing units in the San Bruno. This is an increase of 693 housing units (or 4.5%) from 2010. Approximately 95.7% of the housing units were occupied in January 2015, similar to the occupancy rate in 2010. **Table 3.11-2** presents a comparison of housing unit availability in San Bruno for 2010 and 2015.

Table 3.11-2. San Bruno Housing Units, 2010 and 2015

	2010	2015
Total Housing Units	15,356	16,049
Increase in Housing Units	--	693
Occupied Housing Units	14,701	15,365
Change in Occupied Housing Units	--	+664
Percent Occupied	95.7%	95.7%
Percent Vacant	4.3%	4.3%

Source: California Department of Finance 2015.

Households

In January 2015, there were approximately 15,388 households in San Bruno. As shown in **Table 3.11-3**, ABAG projects that the number of households in the city will increase by approximately 19.6% between 2015 and 2035, with an average growth of approximately 5% every 5 years. The average household size in the San Bruno was 2.86 persons in January 2015 (California Department of Finance 2015).

Table 3.11-3. San Bruno Household Growth Projections 2015–2035

	2015	2020	2025	2030	2035
Number of Households	15,388	16,190	16,900	17,670	18,410
Persons Per Household	2.86	2.81	2.84	2.87	2.90

Source: California Department of Finance 2015; Association of Bay Area Governments 2013a.

Regional Housing Needs Allocation

In July 2013, ABAG adopted the *Final Regional Housing Needs Allocation for the San Francisco Bay Area: 2014–2022*. **Table 3.11-4** shows San Bruno's projected housing needs by income level through 2022. The total RHNA for San Bruno is 1,155 new housing units, divided among defined income groups.[1] As shown in **Table 3.11-4**, the greatest housing need is in the *above-moderate* income category.

[1] *Very-low income* is defined as up to 50%of area median income; *low income* is between 51% and 80% of area median income; *moderate income* is between 81% and 120% of area median income; and *above-moderate income* is above 120% of area median income.

Table 3.11-4. San Bruno Regional Housing Needs Allocation, 2014–2022

	Very Low Income	Low Income	Moderate Income	Above Moderate Income	Total
Housing Units	358	161	205	431	1,155
Percent of Total	31%	14%	18%	37%	100%

Source: Association of Bay Area Governments 2013b.

San Bruno Employment

ABAG estimates that the San Mateo County will experience an approximately 15% increase in jobs from 374,940 jobs in 2015 to 432,980 jobs in 2035. The number of jobs in San Bruno is projected to increase by approximately 19% between 2015 and 2035. **Table 3.11-5** summarizes the projected 5-year incremental increases in jobs in San Bruno and San Mateo County from 2015 to 2035. Approximately 4% of the jobs in San Mateo County are located in San Bruno. This trend is projected to continue until 2035.

San Bruno is largely residential, with approximately one job for every four residents (City of San Bruno 2015). The city has more employed residents than jobs (**Table 3.11-5**), which means that some employed residents living in the city work elsewhere and are out-commuting. Approximately 94% of San Bruno residents leave the city to go to work, and workers from other jurisdictions represent 91% of the jobs in the city (City of San Bruno 2015). Conversely, San Mateo County has more jobs than employed residents. This trend is expected to continue for both the city of San Bruno and San Mateo County through 2035. By 2035, San Bruno is projected to have 16,360 jobs and 27,520 employed residents, a ratio of 0.59 job per every employed resident. This ratio is expected to remain between 0.59 and 0.61 from 2015 through 2035.

Table 3.11-5. San Bruno and San Mateo County Jobs and Employed Residents Projections, 2015–2035

	2015	2020	2025	2030	2035
San Bruno					
Total Jobs	13,800	15,010	15,390	15,810	16,360
Employed Residents	22,630	24,760	25,560	26,400	27,520
Jobs per Employed Resident	0.61	0.61	0.60	0.60	0.59
San Mateo County					
Total Jobs	374,940	407,550	414,240	421,500	432,980
Employed Residents	368,790	398,220	406,310	413,740	425,830
Jobs per Employed Resident	1.02	1.02	1.02	1.02	1.02

[a] ABAG employment projections are for the City of San Bruno's sphere of influence.
Source: Association of Bay Area Governments 2013b.

3.11.3 Impacts Analysis

3.11.3.1 Methodology

Identifying the Project's impacts on population and housing involves reviewing of ABAG's *Projections 2013* (ABAG 2013a), reviewing the San Bruno General Plan and Housing Element 2015-2023, and measuring the Project's population growth in relation to that data.

3.11.3.2 Significance Criteria

The State CEQA Guidelines Appendix G (14 CCR 15000 et seq.) has identified significance criteria to be considered for determining whether a project could have significant impacts on existing population and housing.

An impact would be considered significant if construction or operation of the Project would have any of the following consequences.

- Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

3.11.3.3 Impacts and Mitigation Measures

Cañada College

Impact CC-POP-1: Directly induce substantial population growth due to expanding existing facilities or developing new residential units (less than significant)

The Project includes facility improvements to upgrade and modernize the existing facilities and to better serve the same number of current students and staff at Cañada College. As discussed in Chapter 2, *Project Description*, the proposed improvements would not facilitate or result in increases in enrollment, employment, or contribute to campus growth. Enrollment at the campus has stabilized and is not based on the size of campus buildings. Project improvements, including increases in building square footage to improve functionality, is not expected to induce student enrollment or campus employment growth.

The Health Club and pool facilities located within the new Building 1, Kinesiology/Wellness, would be open to public membership, in addition to use by students, staff, and faculty. It is anticipated that the Health Club and pools could generate up to approximately 6,000 members, including faculty, students, staff, and members of the public. These new public members are anticipated to be existing residents from the surrounding community; the Health Club and pools are not expected to attract a new population or induce substantial population growth in the area. Further, the Project does not include constructing new residential units on the Cañada College campus, and most students live in the surrounding area and commute to campus. The District does not anticipate more students moving to the surrounding community as a result of the planned improvements. Therefore, impacts on population growth would be less than significant. No mitigation is required.

Impact CC-POP-2: Indirectly induce substantial population growth due to jobs created by Project construction (less than significant)

Construction of the Project would result in a temporary increase in construction-related job opportunities in the local area. However, the opportunities provided by construction of the Project would not likely result in household relocation by construction workers to the Project vicinity since these jobs would be temporary. Construction workers would be expected to be drawn from the construction employment labor force already residing in the Project area and the surrounding

communities or would commute from communities outside of the county. It is not likely that construction workers would relocate their place of residence as a consequence of working on the Project. The increase in construction-related jobs would not be permanent and, therefore, employment opportunities provided by construction of the Project would not generate substantial population growth. This impact would be less than significant. No mitigation is required.

Impact CC-POP-3: Displace existing housing or people, necessitating the construction of replacement housing elsewhere (no impact)

The Project would not involve the displacement of existing housing units or people. Students currently attending courses in a building to be replaced or renovated could be temporarily relocated to another building. Project improvements would not displace existing housing or people necessitating the construction of replacement housing elsewhere. There would be no impact.

College of San Mateo

Impact CSM-POP-1: Directly induce substantial population growth due to expanding existing facilities or developing new residential units (no impact)

The Project includes improvements to upgrade and modernize the existing facilities and to better serve the same number of current students and staff at CSM. As discussed in Chapter 2, *Project Description*, the proposed improvements would not facilitate or result in increases in enrollment, employment, or contribute to campus growth. Enrollment at the campus has stabilized and is not based on the size of campus buildings. Therefore, Project improvements, including increases in building square footage to improve functionality, is not expected to induce student enrollment or campus employment growth. Further, the Project does not include constructing new residential units on the CSM campus, and most students live in the surrounding area and commute to campus. The District does not anticipate more students moving to the surrounding community as a result of the planned improvements. Therefore, there would be no impact.

Impact CSM-POP-2: Indirectly induce substantial population growth due to jobs created by Project construction (less than significant)

Construction of the Project would result in a temporary increase in construction-related job opportunities in the local area. However, the opportunities provided by construction of the Project would not likely result in household relocation by construction workers to the Project vicinity since these jobs would be temporary. Construction workers can be expected to be drawn from the construction employment labor force already residing in the Project area and the surrounding communities or would commute from communities outside of the County. It is not likely that construction workers would relocate their place of residence as a consequence of working on the Project. The increase in construction-related jobs would not be permanent and, therefore, employment opportunities provided by construction of the Project would not generate substantial population growth. This impact is less than significant. No mitigation is required.

Impact CSM-POP-3: Displace existing housing or people, necessitating the construction of replacement housing elsewhere (no impact)

The Project would not involve the displacement of housing units or people. Students currently attending courses in a building to be replaced or renovated could be temporarily relocated to another building. Project improvements would not displace existing housing or people necessitating the construction of replacement housing elsewhere. There would be no impact.

Skyline College

Impact SC-POP-1: Directly induce substantial population growth due to expanding existing facilities or developing new residential units (less than significant)

The Project includes improvements to upgrade and modernize the existing facilities and to better serve the same number of current students and staff at Skyline College. As discussed in Chapter 2, *Project Description*, the proposed improvements would not facilitate or result in increases in enrollment, employment, or contribute to campus growth. Enrollment at the campus has stabilized and is not based on the size of campus buildings. Therefore, Project improvements, including increases in building square footage to improve functionality, is not expected to induce student enrollment or campus employment growth.

The Project would include residential development on 8-acres (on Surplus Parcel B) at Skyline College with up to 71 housing units. The new housing units would be comprised of up to 24 multi-family residential buildings for college faculty and staff and up to 47 single-family detached homes that would be constructed by an independent developer and would be available to the general public. The 24 new faculty multi-family housing units are not intended to provide additional capacity or to increase staffing levels; this element of the Project would provide an important resource for retaining top-level professors and staff at the college. However, many existing staff currently commute from outside of San Bruno. Therefore, it is anticipated that the multi-family residential buildings would generate a new population as existing College faculty and staff would move to San Bruno and occupy these housing units.

The 47 new single-family homes would be available to the general public and would generate a new population in San Bruno. Based on San Bruno's average household size, occupancy of the new housing units would be projected to increase the city's population by approximately 198 residents[2] (City of San Bruno 2015). For the years 2015 to 2035, the ABAG Projections 2013 report anticipates a population increase of 9,491 residents in San Bruno. The ABAG Projections reflect a trend of continued development in San Bruno, and the Project's residential complex is included in the population projections for the city.[3] Population generated by the Project represents approximately 2.0% of the projected growth. Given that the number of housing units and estimated direct population increase associated with the Project would be within the number projected by ABAG, direct impacts from population and housing growth would be less than significant. No mitigation is required.

Impact SC-POP-2: Indirectly induce substantial population growth due to jobs created by Project construction (less than significant)

Construction of the Project would result in a temporary increase in construction-related job opportunities in the local area. However, the opportunities provided by construction of the Project would not likely result in household relocation by construction workers to the Project vicinity since these jobs would be temporary. Construction workers can be expected to be drawn from the

[2] 198 persons = 71 units * 2.79 persons per household (San Bruno's 2015 average persons per household). This population generation rate (2.79 persons/household) is different from the population generation rated used in Section 3.13, *Recreation*. For the purposes of calculating the dedication of parkland/payment of fees for parklands, Section 12.44.140(B) of the City of San Bruno Municipal Code prescribes using a population generation rate of 3.0 persons/household for single-family units and 2.5 persons/household for multiple-family units.

[3] The buildout of the 2025 City of San Bruno General Plan included residential subdivisions (115 housing units) at Skyline College.

construction employment labor force already residing in the Project area and the surrounding communities or would commute from communities outside of the county. It is not likely that construction workers would relocate their place of residence as a consequence of working on the Project. The increase in construction-related jobs would not be permanent and, therefore, employment opportunities provided by construction of the Project would not generate substantial population growth. This impact is less than significant. No mitigation is required.

Impact SC-POP-3: Displace existing housing or people, necessitating the construction of replacement housing elsewhere (no impact)

The Project would not involve the displacement of housing units or people. Students currently attending courses in a building to be replaced or renovated could be temporarily relocated to another building. Project improvements would not displace existing housing or people necessitating the construction of replacement housing elsewhere. There would be no impact.

3.11.3.4 Cumulative Impacts

The cumulative impact analysis is based on the projections approach, using the general plans of the Redwood City, Woodside, San Mateo, and San Bruno as the basis for future growth projections. At the present time, due to the boom in employment in the technology industry, commercial office development on the San Francisco Peninsula has outstripped the available supply of affordable housing for workers. Projects that increase employment opportunities contribute to the imbalance of available housing.

The Project will not increase enrollment or result in a substantial increase in employment at the colleges and, with the exception of the proposed residential development on Surplus Parcel B at Skyline College, will not result in an increase in population. As a result, it will not contribute to the demand that is resulting in a shortage of affordable housing.

For purposes of examining cumulative impacts on population, the San Bruno General Plan was used as the backdrop for future potential development. Based on the general plan, the ABAG Projections 2013 report projects a population increase in the City of San Bruno of 9,491 residents between the years 2015 and 2035. The residential component of the Skyline College proposal will increase the population of San Bruno by approximately 198 residents. As discussed in Impact SC-POP-1, this would result in a small incremental change that would be readily absorbed into the city's projected growth.

The Project would not result in a cumulatively considerable contribution to population and housing impacts.

3.12 Public Services and Utilities

This section describes the regulatory and environmental setting for public services and utilities. It also describes impacts on public services and utilities that would result from implementation of the Project and mitigation for significant impacts, where feasible and appropriate.

Public services addressed in this section include fire protection, police protection, and schools. Utilities addressed in this section include water supply, wastewater, stormwater drainage, and solid waste disposal. Parks and other recreation facilities are addressed in Section 3.13, *Recreation*. Water quality as it relates to stormwater drainage is addressed in Section 3.8, *Hydrology and Water Quality*.

3.12.1 Regulatory Setting

The following regulations are relevant to public services and utilities and apply to implementation of the Project on all three campuses, unless otherwise specified.

3.12.1.1 Federal

Federal regulations relevant to water quality are described in Section 3.8, *Hydrology and Water Quality*. There are no additional federal regulations for public services and utilities applicable to the Project.

3.12.1.2 State

State of California regulations relevant to water quality are described in Section 3.8, *Hydrology and Water Quality*.

California Government Code Section 65996

California Government Code Section 65996 describes the exclusive methods of considering and mitigating impacts on school facilities that result or could result from any state or local agency action, including development of real property. One of these methods is through Education Code Section 17620, described below.

Education Code Section 17620

Education Code Section 17620 authorizes school districts to levy a fee, charge, dedication, or other form of requirement against any development project for the construction or reconstruction of school facilities provided the district can show justification for levying of fees.

Senate Bill 610

Senate Bill (SB) 610 requires local water providers to conduct a water supply assessment (WSA) for projects proposing over 500 housing units, 250,000 square feet (sf) of commercial office space (or more than 1,000 employees), a shopping center or business establishment with over 500,000 square feet (or more than 1,000 employees), or equivalent usage. A WSA is not required for the Project because it consists of only 71 housing units on the Skyline College campus, and there would be no commercial space at any of the three campuses.

Assembly Bill 939 and SB 1016

The California Integrated Waste Management Act of 1989, or Assembly Bill (AB) 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50% of all solid waste generated (from 1990 levels) from going to landfills, beginning January 1, 2000, and divert at least 75% by 2010.

In 2006, SB 1016 updated the requirements. The new per capita disposal and goal measurement system shifted the emphasis from an estimated diversion measurement number to an actual disposal measurement number as a factor, along with evaluating program implementation efforts. These two factors will help determine each jurisdiction's progress toward achieving AB 939 diversion goals. The 50% diversion requirement is now measured in terms of per capita disposal expressed as pounds per person per day.

Assembly Bill 75

AB 75, passed in 1999, took effect on January 1, 2000, and mandated state agencies to develop and implement an integrated waste management plan (IWMP). The changes brought about by AB 75 required each state agency or large state facility—e.g., state universities, community colleges, prisons within the Department of Corrections, facilities of the Department of Transportation, and any other agencies identified by the California Integrated Waste Management Board (CIWMB)—to develop an IWMP by July 1, 2000; to divert at least 25% of its solid waste from landfills or transformation facilities by January 1, 2002; and to divert 50% by January 1, 2004. In addition to the waste diversion goals, all state agencies are required to buy recycled materials from 12 different categories, ranging from paper and plastic to paint, solvents, and lubricating oils.

3.12.1.3 Local

As stated in Section 2.6 of Chapter 2, *Project Description*, the District is exempt from the application of city and county zoning ordinances, except the proposed residential complex at Skyline College because it would have a non-educational use. However, the current zoning and applicable general plan provisions for each campus are provided below for informational purposes.

Redwood City General Plan

There are no relevant Redwood City General Plan policies or regulations for public services and utilities applicable to the Project.

Town of Woodside General Plan

There are no relevant Woodside General Plan policies or regulations for public services and utilities applicable to the Project.

City of San Mateo General Plan

There are no relevant San Mateo General Plan policies or regulations for public services and utilities applicable to the Project.

City of San Bruno

The San Bruno General Plan contains goals and policies related to public services and utilities. The policies related to public services and utilities applicable to the residential complex at Skyline College are listed below.

LUD-76. Assure that new development mitigates impacts on existing public services, including transit services, water, sewer, and storm drainage systems, police and fire protection, libraries, and parks and recreational facilities.

PFS-1. Prepare and adopt an Infrastructure In-Lieu Fee Schedule to ensure that adequate improvements are made to the City's public facilities to accommodate new development.

PFS-3. Require, as part of plan review, identification of needed public service improvement and maintenance costs for those projects that may have a significant impact on existing services.

PFS-8. Coordinate with the City's Public Works Department so that adequate water supply capacity and infrastructure are available. Require expansion of the City's water distribution system proportionate with new development's fair share of demand.

PFS-13. Establish water conservation Best Management Practices (BMPs) and require them for new development and for municipal buildings and facilities.

PFS-20. Coordinate with the City's Public Works Department so that adequate wastewater treatment capacity and infrastructure are available. Require expansion of the City's sewer collection system proportionate with new development's fair share of demand.

PFS-31. Ensure adequate fire water pressure as a condition of approval for all new development projects.

3.12.2 Environmental Setting

3.12.2.1 Cañada College

Fire Protection Services

Cañada College campus is served by both the Woodside Fire Protection District (WFPD) and the Redwood City Fire Department (RCFD). WFPD employs 1 fire chief, 4 battalion chiefs, 9 fire captains, 1 fire marshal, 33 firefighter and firefighter paramedics, and administrative staff (Woodside Fire Protection District 2015). RCFD employs 90 staff members, including firefighters, firefighter/ paramedics, captains, battalion chiefs, fire prevention staff, training staff, and administrative staff (City of Redwood City 2015a). Currently, the WFPD and RCFD operate under a mutual aid agreement, whereby personnel and equipment can be dispatched to the site from WFPD and/or RCFD stations located near the Cañada College campus. The nearest fire station to the campus is WFPD Station #19 at 850 California Way in Emerald Hills, about 1 mile northeast. The nearest station within the RCFD is Station #12 at 3700 Jefferson Avenue in Redwood City, about 2.5 miles east of the campus. RCFD Station 12's average response time is 5 minutes and 13 sections (City of Redwood City 2010).

Police Protection Services

Cañada College is primarily served by the campus security and the San Mateo County Sheriff's Department. The Sheriff's Department is headquartered in Redwood City, employs over 600 sworn and civilian personnel, and provides general law enforcement services and patrol to unincorporated areas of San Mateo County and the contract cities of Portola Valley and Woodside (San Mateo County Sheriff's Office 2015).

Cañada College's campus security is provided by professionally trained district security officers and is regularly patrolled by officers from the Sheriff's Department. These officers enforce all applicable local, state, and federal laws, with special emphasis on laws involving alcohol, controlled substances, and weapons, and they respond to medical and fire emergencies.

Schools and Other Community Facilities

Cañada College provides community college educational services. A number of degrees and credentials can be pursued on campus including two- and four-year degrees (e.g., San Francisco State University conducts a nursing program on site). Additionally, Cañada Middle College High School is located on the Cañada College campus.

Off campus, there are four school districts that serve Redwood City and the Town of Woodside residents from kindergarten through 12th grade. The Redwood City School District, serving children in kindergarten through 8th grade, operates 15 elementary schools and 2 middle schools in the city (City of Redwood City 2010). The Belmont-Redwood Shores School District has 2 elementary schools located in Redwood City—Sandpiper Elementary and Redwood Shores Elementary (Belmont-Redwood Shores School District 2015). The Woodside Elementary School District serves children in kindergarten through 8th grade within the town, operating the Woodside Elementary School (Woodside Elementary School District 2015). Sequoia Union High School District serves Redwood City and the Town of Woodside's high school students and operates 4 high schools within Redwood City and Woodside.

Electricity and Natural Gas Supply

Cañada College obtains its electricity and natural gas supply from Pacific Gas & Electric Company (PG&E). A grid-tied 1.25 megawatt solar farm on campus provides nearly 60% of the net energy required for campus operations.

Water Supply

Cañada College obtains its water from the City of Redwood City. The City purchases 100% of its drinking water from the Hetch Hetchy regional water system, operated by the San Francisco Public Utility Commission (SFPUC). The City's 2010 Urban Water Management Plan (UWMP) assumes a relatively steady amount of water purchases from the SFPUC through 2030 (City of Redwood City 2011). Redwood City's water distribution system infrastructure consists of 265 miles of distribution mains, 12 storage reservoirs (with a combined capacity of 21 million gallons), 10 pump stations, 2,385 fire hydrants, and 26 pressure reducing valve stations (City of Redwood City 2010).

In response to California's ongoing drought, the SFPUC has enacted the following water use restrictions.

- Effective June 1, 2015 and until further notice, for all customers in and outside San Francisco, are required to voluntarily reduce water use by 10% as compared to 2013.
- Effective July 1, 2015, for all irrigation use in and outside San Francisco, outdoor landscape watering is required to be reduced by 25% as compared to 2013.

Redwood City consumed approximately 11,144 acre-feet per year (AFY) of water during fiscal year 2009/2010. The City anticipates total water use to increase to 12,749 AFY during the 2014/2015 fiscal year and to 13,446 AFY during the 2019/2020 fiscal year (City of Redwood City 2010). Per

capita consumption averages approximately 100 gallons of water per day (City of Redwood City 2015c). In response to the ongoing drought, the City has implemented mandatory water use restrictions (City of Redwood City 2015b).

Table 3.12-1 shows the historic and current water use at Cañada College from 2009 through 2014. Water use generally increased at Cañada College from 2009 through 2013, largely due to campus buildout. However in 2014, Cañada College reduced its water use by approximately 15% from 2013 as a result of recent Districtwide water conservation efforts. Water conservation efforts at Cañada College are expected to continue as part of the District's Water Efficiency Program which identifies a target goal of a 25% total reduction in water use from the previous year's baseline water use (San Mateo County Community College District 2015).

Table 3.12-1. Cañada College Water Use 2009–2014

Calendar Year	Total Water Use (gallons)
2009	11,662,068
2010	10,252,836
2011	13,241,096
2012	13,712,336
2013	15,126,804
2014	12,908,236

Source: San Mateo County Community College District 2015.

Wastewater

The City of Redwood City Public Works Services Department provides sewer collection services to the Cañada College campus. The City's sanitary sewer collection system operates primarily via gravity flow and consists of approximately 192 miles of sewer mains, along with 31 sewer lift stations (City of Redwood City 2010). The sewage is treated at the South Bayside System Authority (SBSA) Wastewater Treatment Plant, located on the western shore of San Francisco Bay. This facility provides secondary treatment of domestic and industrial wastewater to cities in southern San Mateo County. Redwood City's average dry weather allocation at the SBSA treatment plant is 13.8 million gallons per day and peak wet weather allocation is 30.5 million gallons per day (City of Redwood City 2010). Treated wastewater is discharged into the San Francisco Bay.

The City of Redwood City estimates a per capita wastewater generation rate of 70 gallons per day (City of Redwood City 2010). According to the SBSA, Redwood City's highest peak hourly flow rate was 29.22 million gallons a day in January 2008 (City of Redwood City 2010).

Stormwater Drainage

The Cañada College campus is served by the City of Redwood City's storm drain, creek, and channel services. The City Public Works Services Department maintains the system, which consists of over 100 miles of storm drain pipe, catch and retention basins, culverts, and creeks.

Solid Waste

Allied Waste Industries Incorporated provides waste collection, recycling, and disposal services to several cities within San Mateo County (including Atherton, Belmont, Burlingame, East Palo Alto, Foster City, Half Moon Bay, Hillsborough, Menlo Park, Redwood City, San Carlos, San Mateo, North Fair Oaks, and La Honda). The company also provides services to Cañada College under a franchise agreement. Collected waste is transported to the South Bayside Transfer Station (SBTS) in San Carlos and is then transported to the Corinda Los Trancos (Ox Mountain) Landfill east of Half Moon Bay in unincorporated San Mateo County. Ox Mountain Landfill is permitted to accept 3,598 tons of waste per day and has a total estimated permitted capacity of 69 million cubic yards (California Department of Resources Recycling and Recovery [CalRecycle] 2015a). As of May 2011, Ox Mountain Landfill is estimated to have a remaining capacity of 27 million cubic yards, representing 39% of total capacity available for use (CalRecycle 2015a). The landfill is currently permitted to operate through January 2018.

3.12.2.2 College of San Mateo

Fire Protection Services

The College of San Mateo (CSM) campus is served by the City of San Mateo Fire Department (SMFD). SMFD has 88 full-time employees, including 75 operations, 2 training, 2 administration, 5 fire prevention, and 4 support staff members (City of San Mateo 2009). The nearest fire station to the CSM campus is Station #27 at 1801 De Anza Boulevard near Highway 92, about 1 mile south of the campus. All fire stations are staffed 24 hours per day, 365 days per year, and each station has 1 fire engine staffed with 3 firefighters. SMFD's response time to 90% of all calls is 6 minutes and 18 seconds (City of San Mateo 2009).

Police Protection Services

CSM is primarily served by the campus security and the City of San Mateo Police Department (SMPD). SMPD has 114 sworn full-time officers (1 chief, 1 deputy chief, 2 captains, 6 lieutenants, 17 sergeants, and 87 officers), 15 dispatchers, 9 community service officers, and 5 administrative staff (City of San Mateo 2009). The SMPD is headquartered at 200 Franklin Parkway in San Mateo, and the CSM campus is located within Policing Area 2.

Regularly scheduled security coverage for CSM campus is provided by professionally trained District Security Officers. District Security Officers and SMPD enforce all applicable federal, state, and local laws, with special emphasis on laws involving alcohol, controlled substances, and weapons. They also respond to medical and fire emergencies.

Schools and Other Community Facilities

CSM provides community college services. Additionally, Middle College, which is an alternative high school education program with approximately 70 students enrolled, is located on the CSM campus (College of San Mateo 2015a). CSM also houses the Mary Meta Lazarus Child Development Center, which provides early care and education for approximately 48 children ages 2–5 years for the CSM community (College of San Mateo 2015b).

Off campus, there are two school districts that serve San Mateo residents from kindergarten through 12th grade. The San Mateo-Foster City School District, serving children in kindergarten through 8th grade, operates 13 elementary schools, 3 middle schools, and 1 kindergarten through 8th grade school in the city. The San Mateo Union High School District serves the city's high school students and operates 3 high schools in San Mateo.

Electricity and Natural Gas Supply

The College of San Mateo obtains its electricity and natural gas supply from PG&E.

Water Supply

CSM obtains its water from the California Water Service Company (Cal Water) and is located within Cal Water's Mid-Peninsula District. All of Cal Water's water supplies are purchased from SFPUC, which supplies water from Hetch Hetchy Reservoir. Cal Water assumes a relatively steady amount of water purchases from SFPUC through 2030 (City of San Mateo 2009). Water is received from the SFPUC through eight metered connections with four SFPUC transmission lines. Cal Water's water distribution system infrastructure also consists of 37 separate pressure zones with 19 storage tanks and 30 booster pumps (City of San Mateo 2009).

In response to California's ongoing drought, SFPUC has enacted water use restrictions that will apply to the water supplied to the City of San Mateo. These restrictions are the same as those described for Cañada College in Section 3.12.2.1.

Cal Water's Mid-Peninsula District consumed approximately 18,562 AFY of water during 2010. Cal Water anticipates total water use to increase to 18,780 AFY in 2015 and to 19,004 AFY in 2020 (City of San Mateo 2009). Per capita consumption averages approximately 128 gallons of water per day for all users or 89.7 gallons of water per day for residential users (City of San Mateo 2009). In response to the ongoing drought, Cal Water has implemented mandatory water use restrictions (Cal Water 2015).

Table 3.12-2 shows the historic and current water use at CSM from 2009 through 2014. Water use generally increased at CSM from 2009 through 2013, largely due to campus buildout. However, in 2014, CSM reduced water use by approximately 26% from 2013 as a result of recent Districtwide water conservation efforts. Water conservation efforts at CSM are expected to continue as part of the District's Water Efficiency Program, which identifies a target goal of a 25% total reduction in water use from the previous year's baseline water use (San Mateo County Community College District 2015).

Table 3.12-2. College of San Mateo Water Use 2009–2014

Calendar Year	Total Water Use (gallons)
2009	20,703,144
2010	24,722,896
2011	32,675,632
2012	38,132,292
2013	48,711,256
2014	36,166,548

Source: San Mateo County Community College District 2015.

Wastewater

The City of San Mateo Public Works Department provides sewer collection services to the CSM campus. The City's underground collection system comprises 236 miles of sanitary collection system mainlines and 25 sewer lift stations (City of San Mateo 2009). All wastewater in San Mateo is treated at the City of San Mateo's wastewater treatment plant on Detroit Avenue, which treats about 12.1 million gallons per day. This facility is a jointly-owned facility between the Cities of San Mateo (75% ownership) and Foster City (25% ownership) (City of San Mateo 2009). The City of San Mateo's 75% facility ownership is used by the Town of Hillsborough, Crystal Springs County Sanitation District, the County of San Mateo, and the City of San Mateo. The facility has an average daily design flow of 15.7 million gallons a day and a peak hourly wet weather capacity of 60 million gallons per day. Treated water is discharged into the San Francisco Bay (City of San Mateo 2009).

Storm Drainage

CSM is served by the City of San Mateo's storm drainage system, which is composed of about 130 miles of storm drains, 20 miles of open creeks and drainage channels, 1 flood control lagoon, 9 pumping stations, and 3 miles of bayfront levee (City of San Mateo 2015). The storm drains usually flow to the nearest creek or watercourse. There are no water bodies on the CSM campus.

Solid Waste

Allied Waste Industries Incorporated provides waste collection, recycling, and disposal services to several cities within San Mateo County (including Atherton, Belmont, Burlingame, East Palo Alto, Foster City, Half Moon Bay, Hillsborough, Menlo Park, Redwood City, San Carlos, San Mateo, North Fair Oaks, and La Honda). The company also provides services to CSM under a franchise agreement. Collected waste is transported to the SBTS located in the city of San Carlos and then transported to the Ox Mountain Landfill located east of Half Moon Bay in unincorporated San Mateo County. Ox Mountain Landfill is permitted to accept 3,598 tons of waste per day and has a total estimated permitted capacity of 69 million cubic yards (CalRecycle 2015a). As of May 2011, Ox Mountain Landfill is estimated to have a remaining capacity of 27 million cubic yards, representing 39% of total capacity available for use (CalRecycle 2015a). The landfill is currently permitted to operate through January 2018.

3.12.2.3 Skyline College

Fire Protection Services

The Skyline College campus is served by the City of San Bruno Fire Department (SBFD). SBFD employs 29 firefighters/captains and 3 battalion chiefs (Allan 2015). SBFD is part of a joint powers authority (JPA) among the County of San Mateo and 20 incorporated cities in the county. The JPA requires the closest available engine, truck company, and battalion chief to respond to fire calls. The nearest fire station to Skyline College is Station #52 at 1999 Earl Avenue, about 1 mile southeast of campus. Response times average 3–6 minutes, measured against a countywide standard of nearly 7 minutes (City of San Bruno 2008). The average response time to Skyline College from Station #52 is approximately 4 minutes (Allan 2015).

Police Protection Services

The Skyline College campus is served by campus security and the City of San Bruno Police Department (SBPD). SBPD employs 48 sworn officers, 15 civilian employees, and 1 reserve police officer and is headquartered at 1177 Huntington Avenue in San Bruno (Hoyer 2015). SBPD deploys officers in a beat management system, which divides the city into three beats. The Project site is located within Beat 3, which covers the areas west of Interstate 280 (I-280) in San Bruno. The SBPD's estimated response times to calls from the campus are 2 minutes for emergencies and 6 minutes for non-emergencies (City of San Bruno 2008).

Regularly scheduled security coverage for Skyline College campus is provided by the SBPD and professionally trained District security officers. The Security Office is in Building 2, Rooms 2317 and 2319, and is staffed by approximately nine people. District security officers and SBPD enforce all applicable local, state, and federal laws, with special emphasis on laws involving alcohol, controlled substances, and weapons, and they respond to medical and fire emergencies.

Schools and Other Community Facilities

Skyline College provides community college services. Additionally, Skyline College houses the Child Development Laboratory Center (CDLC), which provides child care and early education for approximately 61 children from age 2 to kindergarten for the Skyline College community and surrounding local community (Skyline College 2015). This facility is located in Building 14, Early Childhood Education (Loma Chica). In addition, there is a Middle College located at Skyline College, and a new bachelor's program in radiology will begin in 2016.

Off campus, there are three school districts that serve San Bruno residents from kindergarten through 12th grade. The San Bruno Park Elementary School District, serving children in kindergarten through 8th grade, operates seven elementary schools and one middle school in the city. The South San Francisco Unified School District has one elementary school located in San Bruno—Monte Verde Elementary. The San Mateo Union High School District serves San Bruno's high school students and operates two high schools in San Bruno.

School enrollment in San Bruno has been decreasing steadily since 2000, and many San Bruno schools are under capacity. According to the California Department of Finance, school enrollment countywide is projected to decrease through 2018 (City of San Bruno 2008).

Electricity and Natural Gas Supply

Skyline College obtains its electricity and natural gas supply from PG&E.

Water Supply

Skyline College is served by the water supply system owned and operated by the City of San Bruno. San Bruno's primary water supply is met by local water sources originating from five underground wells and water purchased from SFPUC. The City of San Bruno and SFPUC signed a Water Supply Contract in 1984 that guarantees 3.246 million gallons per day in purchased water. In 2002, the City and SFPUC signed an amendment to the Water Supply Contract that permits San Bruno to purchase supplemental water from SFPUC, when it is available. San Bruno's water system infrastructure consists of 18 booster pumps, 1 filtering plant, 8 storage tanks (with a combined capacity of 8 million gallons), 900 fire hydrants, 9,000 valves, and over 100 miles of water mains ranging from 12 to 16 inches in diameter (City of San Bruno 2008).

In response to California's ongoing drought, the SFPUC has enacted water use restrictions that will apply to the water supplied to San Bruno. These restrictions are the same as described for Cañada College in Section 3.12.2.1.

The City of San Bruno consumes approximately 4.2 million gallons of water per day. This amount has changed very little over the years due to the built-out conditions of the city. Per capita consumption averages approximately 75 gallons per day in the wet season and 125 gallons per day in dry weather (City of San Bruno 2008). In response to the ongoing drought, the City has adopted an Emergency Drought Plan restricting outdoor water use.

Table 3.12-3 depicts the historic and current water use at Skyline College from 2009 through 2014. Water use generally increased at Skyline College from 2009 through 2013, largely due to campus buildout. However, in 2014, Skyline College reduced its water use by approximately 30% from 2013 as a result of recent Districtwide water conservation efforts. Water conservation efforts at Skyline College are expected to continue as part of the District's Water Efficiency Program which identifies a target goal of a 25% total reduction in water use from the previous year's baseline water use (San Mateo County Community College District 2015).

Table 3.12-3. Skyline College Water Use 2009–2014

Calendar Year	Total Water Use (gallons)
2009	11,034,496
2010	10,831,040
2011	13,239,600
2012	16,922,004
2013	16,471,708
2014	11,604,472

Source: San Mateo County Community College District 2015.

Wastewater

The City of San Bruno's Public Works Wastewater Division owns, operates, and maintains the sanitary sewer system that serves the campus. The City's sanitary sewer system consists of approximately 87 miles of pipeline and 6 lift stations (Bosch 2015). Approximately 3.4 million gallons of effluent per day goes to the South San Francisco–San Bruno Water Quality Control Plant (SSF/SB WQCP) for secondary wastewater treatment that the City of San Bruno owns jointly with the City of South San Francisco (City of San Bruno 2015). The SSF/SB WQCP allows for a dry-weather capacity of 13 million gallons per day and a wet-weather capacity of approximately 62 million gallons per day (City of San Bruno 2008). The average wet weather flow through the facility is 9 million gallons per day and the peak wet weather flows can exceed 60 million gallons per day (City of San Bruno 2015). Treated wastewater is discharged into the San Francisco Bay.

The City of San Bruno estimates average discharge of 75 gallons per day per capita for residential users. San Bruno generates an estimated peak flow of 2.8 million gallons of wastewater per day in the dry season and 20 million gallons per day in the wet season (City of San Bruno 2008).

Stormwater Drainage

The campus is served by the storm drainage system owned and operated by the City of San Bruno, which drains to the San Francisco Bay. District facilities staff maintains all storm drain inlets and other storm water conveyance infrastructure within the campus boundaries.

Solid Waste

The San Bruno Garbage Company, owned by Norcal Waste Systems, Inc., provides solid waste disposal service to the city and to the campus. Solid waste is brought to the San Bruno Garbage Company's transfer station and is then transported to Ox Mountain Landfill located east of Half Moon Bay in unincorporated San Mateo County. Ox Mountain Landfill is permitted to accept 3,598 tons of waste per day and has a total estimated permitted capacity of 69 million cubic yards (CalRecycle 2015a). As of May 2011, Ox Mountain Landfill is estimated to have a remaining capacity of 27 million cubic yards, representing 39% of total capacity available for use (CalRecycle 2015a). The landfill is currently permitted to operate through January 2018.

3.12.3 Impacts Analysis

3.12.3.1 Methodology

The following analysis considers the increase in demand for public services and utilities associated with the proposed Project and whether or not the increased demand could be accommodated by existing services currently provided to the campus. Information used to assess the impacts on existing public services and utilities in the surrounding region of the campuses was obtained directly from available public information and personal communication with public service and utility providers.

3.12.3.2 Significance Criteria

The State CEQA Guidelines Appendix G (14 CCR 15000 et seq.) has identified significance criteria to be considered for determining whether a project could have significant impacts on existing public services and utilities.

An impact would be considered significant if construction or operation of the Project would have any of the following consequences.

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services.
    - Fire protection.
    - Police protection.
    - Schools.
    - Parks (addressed in Section 3.13, *Recreation*).
    - Other public facilities.

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Would not have sufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements would be needed.
- Result in a determination by the wastewater treatment provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- Be served by a landfill that does not have sufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Violate with federal, state, and local statutes and regulations related to solid waste.

3.12.3.3 Impacts and Mitigation Measures

Cañada College

Impact CC-PSU-1: Reduce service ratios and response times for fire protection and police protection services during construction and operation (less than significant)

During Project construction, emergency vehicle access would be maintained at all times, and the main access roads would be open at all times (refer to Section 2.4.6.3 in Chapter 2, *Project Description*). Additionally, a traffic control plan would be developed and implemented, as needed, during construction to ensure emergency access is maintained (refer to EC-TRA-1 in Section 2.7, *Environmental Commitments*).

The Project improvements would not increase capacity, student enrollment, or staffing levels at Cañada College. However, the new Building 1, Kinesiology/Wellness, would be open to the public, increasing the number of people visiting the campus and using the facility daily. Although the new Kinesiology/Wellness building would increase the number of people using the facility, including a new public membership, this facility would not introduce any new incompatible uses to the campus that fire and police protection services would be unfamiliar with servicing. The new use would not reduce service ratios or increase response times for fire protection and police protection services such that new police or fire facilities would be required. Members using the new facility would be faculty, staff, and students currently using the existing facility for the same purposes, as well as new members from the public. New members would be residents of nearby communities and would not increase the service population (i.e., it is unlikely that people would move to the nearby communities as a result of the new Kinesiology/Wellness building). Therefore, the increase in membership would not result in the need for additional police or fire personnel, would not reduce service ratios, and would not increase response times such that new police or fire facilities would be required. This impact would be less than significant. No mitigation is required.

Impact CC-PSU-2: Increase student enrollment at schools or increase level of service required at other public facilities resulting in an adverse physical impact to these facilities (no impact)

The Project improvements at Cañada College would not increase student capacity, student enrollment, or staffing levels at the campus. Additionally, because no new population is generated, the Project would not result in additional demand for other schools (e.g., kindergarten through 12th grade) or other public facilities. There would be no impact.

Impact CC-PSU-3: Increase demand for water supply at the Project site during construction and operation (less than significant)

Water is likely to be used during Project construction for preventing dust from becoming airborne, routine cleaning of construction equipment, mixing of concrete, and other purposes. Water demand during the construction phase would not be substantial; could be accommodated with the District's current water supply at Cañada College; and would not require additional water treatment facilities, supplies, or entitlements.

The proposed Project improvements at Cañada College would not increase capacity, student enrollment, or staffing levels at the campus. The new Building 23, Math/Science/Engineering , and the new Building 1, Kinesiology/Wellness—which would be larger than the existing gymnasium and would include two new pools and be open to the public—could result in increased water use. Water use at Cañada College has decreased by approximately 15% from 2013 due to Districtwide water conservation efforts and is expected to continue to decrease as part of the District's Water Efficiency Program. The design of the new Building 1, Kinesiology/Wellness, as well as the other new construction associated with the Project, would target LEED[1] Gold certification. LEED standards include requisites and credits for indoor and outside water use reduction over existing conditions. Building features will include water reclamation equipment and infrastructure that would partially offset the increase in water use associated with the expanded square footage of the facility. Water use associated with the two new pools is estimated to be approximately 0.27 million gallons a year (Berkshire 2015). Water use associated with pools in schools account for approximately 1% of end water uses in educational facilities (Environmental Protection Agency 2012). Thus, water use associated with the new pools would not be a significant new source of water demand. The new pools at Cañada College would use the most water-efficient filtration and makeup water systems allowed by the California Health and Safety Code for swimming pools. Further, the increased use would be partially offset by reduced use at other buildings and the installation of low-flow fixtures for lavatories, showers, sinks, urinals, and toilets. Additionally, all new landscaping would be drought tolerant and would use reclaimed, non-potable water. (Refer to Sections 2.4.4 and 2.4.5 in Chapter 2, *Project Description*.) The Project would not result in the need for additional water supply significantly over existing demand. Therefore, the impact on water system capacity and infrastructure would be less than significant. No mitigation is required.

Impact CC-PSU-4: Increase generation of wastewater at the Project site during construction and operation (less than significant)

Wastewater is likely to be generated during Project construction from activities including maintenance, washing, and cleaning for interior building renovations. Portable toilets would be provided for construction workers on the Project site. Wastewater generated during the

[1] LEED, or Leadership in Energy & Environmental Design, is a green building certification program that recognizes best-in-class building strategies and practices.

construction phase would not be substantial; could be accommodated with the District's current wastewater system capacity at Cañada College; and would not require additional wastewater treatment facilities, supplies, or entitlements.

As stated in Section 2.4 of Chapter 2, *Project Description*, the Project improvements at Cañada College would not increase capacity, student enrollment, or staffing levels at the campus. However, the new Building 23, Math/Science/Engineering, and the new Building 1, Kinesiology/Wellness—which would be larger than the existing gymnasium and would be open to the public—could result in increased generation of wastewater associated with the increased water use. Water use at Cañada College has decreased by approximately 15% from 2013 due to Districtwide water conservation efforts and is expected to continue to decrease as part of the District's Water Efficiency Program. Further, the increased wastewater generated would be partially offset by reduced water use (and wastewater generated) at other buildings through the incorporation of water reclamation equipment and infrastructure; installation of low-flow fixtures for lavatories, showers, sinks, urinals, and toilets; and implementation of the District's water conservation measures for pools. (Refer to Sections 2.4.4 and 2.4.5 in Chapter 2, *Project Description*.) The Project would not result in the additional generation of wastewater significantly over existing conditions. Therefore, the Project's impact on wastewater system capacity and infrastructure would be less than significant. No mitigation is required.

Impact CC-PSU-5: Alter stormwater drainage patterns at the Project site (less than significant)

As discussed in Chapter 3.8, *Hydrology and Water Quality*, the Project improvements at the Cañada College campus would increase the amount of impervious surface on the campus, which would increase the amount of stormwater flow from the campus and alter surface drainage patterns. Approximately 4.9 acres of new impervious area would be created on the Cañada College campus by the Project due to the expansion of parking lots, new pedestrian walkways, and new roadways.

Typically, all projects creating and/or replacing 5,000 square feet or more of impervious surfaces would need to comply with the San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) Provision C.3 requirements to treat stormwater runoff and to control stormwater runoff rates and volumes after the construction process. As discussed in Chapter 3.8, *Hydrology and Water Quality,* the District applies its stormwater management program to limit surface water impacts. In addition, the Project improvements would target LEED Gold certification and would target LEED credit requirements for stormwater runoff, and these requirements are comparable to the SMCWPPP Provision C3 requirements.

Further, as discussed in Sections 2.4.5 and 2.5 of Chapter 2, *Project Description*, the Project would comply with the District's Storm Water Management Program, which would ensure that stormwater runoff is handled according to current San Francisco Bay Regional Water Quality Control Board (Regional Water Board) standards, that systems would be designed to effectively manage stormwater flows while protecting local stream water quality, and that the Project would have a net zero increase in stormwater runoff. Accordingly, the Project would not substantially alter the stormwater drainage patterns at the campus and would not require the construction of new stormwater drainage facilities or expansion of existing facilities. Therefore, this impact would be less than significant. No mitigation is required.

Impact CC-PSU-6: Increase generation of solid waste during construction and operation (less than significant)

Construction and demolition activities associated with Project improvements would generate construction waste and debris. It is expected that Project-generated construction waste would likely be received at the Ox Mountain Landfill, which has approximately 39% of total capacity available for use and would be able to accept the Project's construction debris (Simone 2015). Additionally, the Project would be committed to recycle as much construction debris as possible. As discussed in Section 2.4.6, of Chapter 2, *Project Description*, the Project would divert a minimum of 50% (with a target goal of 75%) of all construction waste from the receiving landfill.

Once constructed, the Project improvements at Cañada College would not increase student capacity, student enrollment, or staffing levels at the campus. However, the new Building 1, Kinesiology/ Wellness—which would be approximately 45,500 square feet larger than the existing gymnasium and would be open to public membership—would introduce a new population to the Project site. This new population would increase solid waste generation at the campus. Based on the solid waste generation rate estimates from CalRecycle of 3.12 pounds per 100 square feet per day for health clubs, the Project's new Kinesiology/Wellness building would generate approximately 1,420 additional pounds per day of solid waste.[2] Approximately 50% of the additional solid waste generated (approximately 710 pounds per day) at the Kinesiology/Wellness building would be diverted in order to meet the mandates of AB 75 (discussed in Section 3.12.1.2 and under Impact CC-PSU-7). The Ox Mountain Landfill currently has the capacity for the additional solid waste generated by the Project (Simone 2015). Thus, the Project would not result in the additional generation of solid waste significantly over existing conditions and the receiving landfill has adequate capacity. Therefore, the impact related to solid waste and landfill capacity would be less than significant. No mitigation is required.

Impact CC-PSU-7: Comply with federal, state, and local statutes and regulations related to solid waste (no impact)

AB 75 mandates the District to divert 50% of the District's solid waste stream. To meet the requirements of AB 75, the District has developed and implemented a plan to reduce solid waste as part of the sustainability plan for each campus. Cañada College currently diverts over 60% of its solid waste stream (Cañada College Sustainability Committee 2013). The campus will continue to implement its sustainability plan to meet or exceed the statewide goal of 75% waste diversion by 2020 and strive to achieve zero waste. Thus, the Project would be in compliance with regulations related to solid waste. There would be no impact.

College of San Mateo

Impact CSM-PSU-1: Reduce service ratios and response times for fire protection and police protection services during construction and operation (less than significant)

During Project construction, emergency vehicle access would be maintained at all times, and the main access roads would be open at all times (refer to Section 2.4.6.3 of Chapter 2, *Project Description*). Additionally, a traffic control plan would be developed and implemented, as needed, during construction to ensure emergency access is maintained (refer to EC-TRA-1 in Section 2.7, *Environmental Commitments*).

[2] 1,420 pounds per day = 45,500 square feet * 3.12 pounds per 100 square feet per day.

The Project improvements would not increase capacity, student enrollment, or staffing levels at CSM. It is expected that none of the CSM Project improvements, including the construction of replacement buildings on the campus, would increase the number of people visiting the campus and using the facility. Accordingly, there is no anticipated increase in the demand for fire protection services currently provided by the SMFD and police protection services currently provided by the SMPD at the CSM campus. The Project would not result in the need for additional police or fire personnel, would not reduce service ratios, and would not increase response times. The impact would be less than significant. No mitigation is required.

Impact CSM-PSU-2: Increase student enrollment at schools or increase level of service required at other public facilities resulting in an adverse physical impact to these facilities (no impact)

The proposed CSM Project improvements would not increase student capacity, student enrollment, or staffing levels at the campus. Additionally, because no new population would be generated, the Project would not result in additional demand for other schools (e.g., kindergarten through 12th grade) or other public facilities. There would be no impact.

Impact CSM-PSU-3: Substantially increase demand for water supply at the Project site during construction and operation (less than significant)

Water is likely to be used during Project construction for preventing dust from becoming airborne, routine cleaning of construction equipment, mixing of concrete, and other purposes. Water demand during the construction phase would not be substantial; could be accommodated with the District's current water supply at CSM; and would not require additional water treatment facilities, supplies, or entitlements.

The CSM Project improvements would not increase capacity, student enrollment, or staffing levels at the campus. The new Building 8, Gymnasium—which would be larger than the existing gymnasium—and the new Building 19, Center for Innovation and Emerging Technologies, which would be slightly larger than existing Buildings 12 and 19—could result in increased water use. Water use at CSM has decreased by approximately 26% from 2013 due to Districtwide water conservation efforts and is expected to continue to decrease as part of the District's Water Efficiency Program. Further, the increased use would be partially offset by reduced use at other buildings and the installation of low-flow fixtures for lavatories, showers, sinks, urinals, and toilets. Additionally, all new landscaping would be drought tolerant and would use reclaimed, non-potable water. (Refer to Sections 2.4.4 and 2.4.5 of Chapter 2, *Project Description*.) The Project would not result in the need for additional water supply significantly over existing demand because the Project would not introduce a new population demanding additional water onsite. Therefore, the Project's impact on water system capacity and infrastructure would be less than significant. No mitigation is required.

Impact CSM-PSU-4: Increase generation of wastewater at the Project site during construction and operation (less than significant)

Wastewater is likely to be generated during Project construction from activities including maintenance, washing, and cleaning for interior building renovations. Portable toilets would be provided for construction workers on the campus. Wastewater generated during the construction phase would not be substantial; could be accommodated with the District's current wastewater system capacity at CSM; and would not require additional wastewater treatment facilities, supplies, or entitlements.

As stated in Section 2.4 of Chapter 2, *Project Description*, the Project improvements at CSM would not increase capacity, student enrollment, or staffing levels at the campus. The new Building 8, Gymnasium—which would be larger than the existing gymnasium— and the new Building 19, Center for Innovation and Emerging Technologies, which would be slightly larger than existing Buildings 12 and 19—could result in increased generation of wastewater associated with the increased water use. The increased wastewater generated would be partially offset by reduced water use (and wastewater generated) at other buildings through the installation of low-flow fixtures for lavatories, showers, sinks, urinals, and toilets. (Refer to Sections 2.4.4 and 2.4.5 of Chapter 2, *Project Description*.) The Project would not result in the additional generation of wastewater significantly over existing conditions because the Project would not introduce a new population that would generate additional wastewater onsite. Therefore, the Project's impact on wastewater system capacity and infrastructure would be less than significant. No mitigation is required.

Impact CSM-PSU-5: Alter stormwater drainage patterns at the Project site (less than significant)

As discussed in Chapter 3.8, *Hydrology and Water Quality*, the Project improvements at CSM would increase the amount of impervious surface on the campus, which would increase the amount of stormwater flow from the campus and alter surface drainage patterns. Approximately 0.3 acre of new impervious area would be created on the CSM campus by the Project due to construction of the new Building 8, Gymnasium, and Building 19, Center for Innovation and Emerging Technologies.

Typically, all projects creating and/or replacing 5,000 square feet or more of impervious surfaces would need to comply with the SMCWPPP Provision C.3 requirements to treat stormwater runoff and to control stormwater runoff rates and volumes after the construction process. In addition, the Project improvements would target LEED Gold certification and would target LEED credit requirements for stormwater runoff, and these requirements are comparable to the SMCWPPP Provision C.3 requirements.

Further, as discussed in Sections 2.4.5 and 2.5 of Chapter 2, *Project Description*, the Project would comply with the District's Storm Water Management Program, which would ensure that stormwater runoff is handled according to current Regional Water Board standards, that systems would be designed to effectively manage stormwater flows while protecting local stream water quality, and that the Project would have a net zero increase in stormwater runoff. Accordingly, the Project would not substantially alter the stormwater drainage patterns at the CSM campus and would not require the construction of new stormwater drainage facilities or expansion of existing facilities. The impact would be less than significant. No mitigation is required.

Impact CSM-PSU-6: Increase generation of solid waste during construction and operation (less than significant)

Construction and demolition activities associated with Project improvements would generate construction waste and debris. It is expected the Project-generated construction waste would be received at the Ox Mountain Landfill, which has approximately 39% of total capacity available for use and would be able to accept the Project's construction debris. Additionally, the Project would be committed to recycle as much construction debris as possible. As discussed in Section 2.4.6 of Chapter 2, *Project Description*, the Project would divert a minimum of 50% (with a target goal of 75%) of all construction waste from the receiving landfill.

Once constructed, the CSM Project improvements would not increase student capacity, student enrollment, or staffing levels at the campus and thus would not result in the additional generation of solid waste significantly over existing conditions. Therefore, the Project's impacts related to solid waste and landfill capacity would be less than significant. No mitigation is required.

Impact CSM-PSU-7: Comply with federal, state, and local statutes and regulations related to solid waste (no impact)

AB 75 mandates the District to divert 50% of the District's solid waste stream. To meet the requirements of AB 75, the District has developed and implemented a plan to reduce solid waste as part of the sustainability plan for each campus. In 2004, CSM diverted about 75% of its solid waste stream. The campus will continue to implement its sustainability plan to meet or exceed the statewide goal of 75% waste diversion by 2020 and strive to achieve zero waste. Thus, the Project would be in compliance with regulations related to solid waste. There would be no impact.

Skyline College

Impact SC-PSU-1: Reduce service ratios and response times for fire protection and police protection services during construction and operation (less than significant with mitigation)

During Project construction, emergency vehicle access would be maintained at all times, and the main access roads would be open at all times (refer to Section 2.4.6.3 of Chapter 2, *Project Description*). Additionally, a traffic control plan would be developed and implemented, as needed, during construction to ensure emergency access is maintained (refer to EC-TRA-1 in Section 2.7, *Environmental Commitments*).

The Project improvements would not increase capacity, student enrollment, or staffing levels at Skyline College. However, the residential complex at Skyline College would introduce a new residential population (which would be approximately 198 persons) to the campus. This could result in an increase in demand for fire protection services currently provided by SBFD and police protection services currently provided by SBPD at the Skyline College campus. SBFD and SBPD anticipates that the Project's new residential population would not degrade response times (Allan 2015; Hoyer 2015). Individual project applicants for new developments would be subject to applicable City of San Bruno's fire and police services development impact fee. With implementation of **Mitigation Measure SC-PU-1**, adequate improvements would be made to the City's fire and police protection services to accommodate the new residential development complex on the Skyline College campus, and there would be no reduction in fire or police protection service ratios or increase in fire or police protection response time. The impact would be less than significant.

Mitigation Measure SC-PSU-1: Pay the fire and police services development impact fee to the City of San Bruno for Skyline College

Prior to the issuance of building permits, the District—or if the District sells all or a portion of Surplus Parcel B to a developer or developers—the developer will pay the Project's fair share of the fire and police services development impact fee to the City of San Bruno for the development of the residential complex at Skyline College.

Impact SC-PSU-2: Increase student enrollment at schools or increase level of service required at other public facilities resulting in an adverse physical impact to these facilities (less than significant with mitigation)

The Project improvements would not increase capacity, student enrollment, or staffing levels at Skyline College. However, the residential complex at Skyline College would introduce a new residential population, which would be approximately 198 persons. This could result in an increase in demand for other schools (e.g., kindergarten through 12th grade) or other public facilities. School services within the city of San Bruno are currently under capacity. The San Bruno Park Elementary School District and San Mateo Union High School District collect school impact fees from residential developments within the city to compensate for any potential indirect impact on school services. The payment of these fees is deemed to be full and complete mitigation. With implementation of **Mitigation Measure SC-PSU-2**, adequate improvements would be made to school services to accommodate the new residential development complex on the Skyline College campus. This impact would be less than significant.

Mitigation Measure SC-PSU-2: Pay the San Bruno Park Elementary School District and San Mateo Union High School District school impact fees for Skyline College

The District—or if the District sells all or a portion of Surplus Parcel B to a developer or developers—the developers will pay the Project's fair share of the school impact fees to the San Bruno Park Elementary School District and San Mateo Union High School District for the development of the residential complex at Skyline College.

Impact SC-PSU-3: Increase demand for water supply at the Project site during construction and operation (less than significant with mitigation)

Water would likely be used during Project construction for preventing dust from becoming airborne, routine cleaning of construction equipment, mixing of concrete, and other purposes. Water demand during the construction phase would not be substantial; could be accommodated with the District's current water supply at Skyline College; and it would not require additional water treatment facilities, supplies, or entitlements.

The Project improvements at Skyline College would not increase capacity, student enrollment, or staffing levels at the campus. The new Building 12, Environmental Sciences, the new Building 15, Career and Sustainable Technology, and the new Building 1, Social Sciences/Creative Arts Programs—which is larger than the existing Building 1—could result in increased water use. Water use at Skyline has decreased by approximately 30% from 2013 due to Districtwide water conservation efforts and is expected to continue to decrease as part of the District's Water Efficiency Program. The design of all new construction associated with the Project, would target LEED[3] Gold certification. LEED standards include requisites and credits for indoor and outside water use reduction over existing conditions. Additionally, all new landscaping would be drought tolerant and would use reclaimed, non-potable water. (Refer to Sections 2.4.4 and 2.4.5 of Chapter 2, *Project Description*.) Further, the increased use resulting from the Project would be partially offset by demolition of Buildings 19 and 20 (for the expansion of Lot L), reduced use at other buildings, and the installation of low-flow fixtures for lavatories, showers, sinks, urinals, and toilets. The Project improvements would not result in the need for additional water supply significantly over existing demand.

[3] LEED, or Leadership in Energy & Environmental Design, is a green building certification program that recognizes best-in-class building strategies and practices. These practices cannot be guaranteed for the residential complex at Skyline College because the developer for the single-family homes is not known at this time.

The residential complex at Skyline College would introduce a new residential population (estimated to be approximately 198 persons) to the Project site. This would result in an increase in demand for water supply services currently provided by the City of San Bruno. Based on the water consumption rate estimates in the San Bruno General Plan of 75 gallons per day per capita during the wet season and 125 gallons per day per capita during the dry season, the Project's residential population would generate an additional 14,850 to 24,750 gallons per day of water demand. The City would continue to provide water services to the Project site and anticipates adequate water supply capacity (Tan 2015). However, individual project applicants for the new development would be subject to the City of San Bruno's water capacity fee. With implementation of **Mitigation Measure SC-PSU-3**, adequate improvements would be made to the City of San Bruno's water facilities to accommodate the new residential development complex on the Skyline College campus. The Project would not significantly affect the City's water system capacity and infrastructure. The impacts would be less than significant.

Mitigation Measure SC-PSU-3: Assess the capacity of the City's water and wastewater system infrastructure and pay the capacity fees for Skyline College

Prior to the issuance of building permits, the District—or, if the residential component is controlled by a developer, the developer—will assess whether the existing water and wastewater facilities/infrastructure would need to be upgraded based on proposed water demands for residential complex and fire flow requirements. If the results of the analyses indicates that the pressure and flow are inadequate, then the District—or, if the residential component is controlled by a developer, the developer—will be required to upgrade the water and wastewater facilities to meet the new demands. An engineering report will be submitted to the City of San Bruno for review and approval prior to the issuance of building permits.

The District—or, if the residential component is controlled by a developer, the developer—will pay the Project's fair share of the water and wastewater capacity charges based on meter size to the City of San Bruno for the development of the residential complex at Skyline College.

Impact SC-PSU-4: Increase generation of wastewater at the Project site (less than significant with mitigation)

Wastewater is likely to be generated during Project construction from activities including maintenance, washing, and cleaning for interior building renovations. Portable toilets would be provided for construction workers on the campus. Wastewater generated during the construction phase would not be substantial; could be accommodated with the District's current wastewater system capacity at Skyline College; and would not require additional wastewater treatment facilities, supplies, or entitlements.

As stated in Section 2.4 of Chapter 2, *Project Description*, the Project improvements at Skyline College would not increase capacity, student enrollment, or staffing levels at the campus. The new Building 12, Environmental Sciences Building, the new Building 15, Career and Sustainable Technology, and the new Building 1, Social Sciences/Creative Arts Programs building—which would be larger than the existing Building 1—could result in increased generation of wastewater associated with the increased water use. The increased wastewater generated would be partially offset by reduced water use (and wastewater generated) through the demolition of Buildings 19 and 20 (for the expansion of Lot L) and reduced water use at other buildings and the installation of low-flow fixtures for lavatories, showers, sinks, urinals, and toilets. (Refer to Sections 2.4.4 and 2.4.5 in Chapter 2, *Project Description*.) The Project improvements would not result in the additional generation of wastewater significantly over existing conditions.

The residential complex at Skyline College would introduce a new residential population (estimated to be approximately 198 persons) to the campus. This would result in an increase in wastewater generated at the campus and an associated increase in the demand for wastewater removal services currently provided by the City of San Bruno. Based on the wastewater generation rate estimates in the San Bruno General Plan of 75 gallons per day per capita for residential users, the Project's residential population would generate an additional 14,850 gallons per day of wastewater. The City would continue to provide wastewater collection services to the campus and anticipates adequate wastewater handling capacity (Bosch 2015). Individual project applicants for the new development would be subject to the City of San Bruno's wastewater capacity fee. With implementation of **Mitigation Measures SC-PSU-3**, adequate improvements would be made to the City of San Bruno's wastewater facilities to accommodate the new residential development complex on the Skyline College campus and the Project would not significantly impact the City of San Bruno's wastewater system capacity and infrastructure. This impact would be less than significant.

Mitigation Measure SC-PSU-3: Assess the capacity of the City's water and wastewater system infrastructure and pay the capacity fees for Skyline College

This measure is described under Impact SC-PSU-3.

Impact SC-PSU-5: Alter stormwater drainage patterns at the Project site requiring the construction of new stormwater drainage facilities or expansion of existing facilities (less than significant)

As discussed in Chapter 3.8, *Hydrology and Water Quality*, the Project improvements at Skyline College would increase the amount of impervious surface on the campus, which would increase the amount of stormwater flow from the campus and alter surface drainage patterns. Approximately 4.5 acres of new impervious area would be created on the Skyline College campus by the Project due to the construction of new buildings, expansion of parking lots, new pedestrian walkways, new roadways, and the development of the residential complex.

Typically, all projects creating and/or replacing 5,000 square feet or more of impervious surfaces would need to comply with the SMCWPPP Provision C.3 requirements to treat stormwater runoff and to control stormwater runoff rates and volumes after the construction process. In addition, the Project improvements would target LEED Gold certification and would target LEED credit requirements for stormwater runoff, and these requirements are comparable to the SMCWPPP Provision C.3 requirements.

Further, as discussed in Sections 2.4.5 and 2.5 of Chapter 2, *Project Description*, the Project would comply with the District's Storm Water Management Program, which would ensure that stormwater runoff is handled according to current Regional Water Board standards, that systems would be designed to effectively manage stormwater flows while protecting local stream water quality, and that the Project would have a net zero increase in stormwater runoff. The residential complex at Skyline College is sited on an existing vacant parcel, and the development of the site would include stormwater retention/filtration infrastructure and infrastructure connections to the City of San Bruno's stormwater system. These stormwater facilities would be implemented as part of the Project and would be subject to the same regulations and conditions of approval as other components of the Project. Accordingly, the Project would not substantially alter the stormwater drainage patterns at the Project site. Therefore, the impact would be less than significant. No mitigation is required.

Impact SC-PSU-6: Increase generation of solid waste during construction and operation (less than significant)

Construction and demolition activities associated with Project improvements would generate construction waste and debris. It is expected the Project-generated construction waste would likely be received at the Ox Mountain Landfill, which has approximately 39% of total capacity available for use and would be able to accept the Project's construction debris. Additionally, the Project would be committed to recycle as much construction debris as possible. As discussed in Section 2.4.6 of Chapter 2, *Project Description*, the Project would divert a minimum of 50% (with a target goal of 75%) of all construction waste from the receiving landfill.

Once constructed, the Project improvements at the Skyline College would not increase student capacity, student enrollment, or staffing levels at the campus and thus would not result in the additional generation of solid waste significantly over existing conditions. However, the residential complex at Skyline College would introduce a new residential population (estimated to be approximately 198 persons) to the campus. This would result in an increase in solid waste generated at the Project site and the amount of solid waste that would be brought to the Ox Mountain Landfill. According to CalRecycle, residential waste disposal rates for San Mateo County are 0.42 ton per resident per year (2.3 pounds per resident per day) (CalRecycle 2015b). At this rate, the Project's residential population would produce approximately 455 pounds of solid waste per day. The available capacity at the Ox Mountain Landfill site would be sufficient to serve the Project's solid waste disposal needs. Therefore, the Project's impact on solid waste and landfill capacity would be less than significant. No mitigation is required.

Impact SC-PSU-7: Comply with federal, state, and local statutes and regulations related to solid waste (no impact)

AB 75 mandates the District to divert 50% of the District's solid waste stream. To meet the requirements of AB 75, the District has developed and implemented a plan to reduce solid waste as part of the sustainability plan for each campus. In 2004, Skyline College diverted about 75% of its solid waste stream. The campus, including the proposed residential complex at Skyline College, will continue implement measure in its sustainability plan to meet or exceed the statewide goal of 75% waste diversion by 2020 and strive to achieve zero waste. Accordingly, the Project would be in compliance with regulations related to solid waste. There would be no impact.

3.12.3.4 Cumulative Impacts

Based on the approach used to determine cumulative impacts (discussed in Chapter 4, *Other CEQA-Required Discussions*), there are no significant cumulative impacts with respect to public services or utilities. Therefore, the Project would not contribute to a cumulative impact.

3.13 Recreation

This section describes the regulatory and environmental setting for recreation. It also describes impacts on recreation that would result from implementation of the Project and mitigation for significant impacts, where feasible and appropriate.

3.13.1 Regulatory Setting

The following regulations are relevant to recreation and apply to implementation of the Project on all three campuses, unless otherwise specified.

3.13.1.1 Federal

There are no relevant federal regulations for recreation applicable to the Project.

3.13.1.2 State

Quimby Act

The Quimby Act (California Government Code Section 66477) was established by the California Legislature in 1965 to preserve open space and parkland in the rapidly urbanizing areas of the state. The Quimby Act allows local governments to establish parkland standards (at a maximum of 5 acres per 1,000 residents) and to require residential developers to provide land or in-lieu fees for developing new or rehabilitating existing neighborhood or community park or recreational facilities to serve new residents. As discussed in Section 3.13.1.3, the City of San Bruno has adopted a parkland dedication/in-lieu fee standard to provide adequate parks and recreation facilities throughout the city.

3.13.1.3 Local

As stated in Section 2.6 of Chapter 2, *Project Description*, the District is exempt from the application of city and county zoning ordinances, except the proposed residential complex at Skyline College because it is a non-educational use. However, the current zoning and applicable general plan provisions for each campus are provided for informational purposes.

Redwood City General Plan

There are no relevant Redwood City General Plan policies or regulations for recreation applicable to the Project.

Town of Woodside General Plan

There are no relevant Woodside General Plan policies or regulations for recreation applicable to the Project.

City of San Mateo General Plan

There are no relevant San Mateo General Plan policies or regulations for recreation applicable to the Project.

City of San Bruno Municipal Code

Section 12.44.140 of the San Bruno's Municipal Code requires residential developers to provide for adequate and appropriate recreational land for a residential subdivision through the dedication of land or the payment of in-lieu fees for park and recreational purposes. The City's established parkland dedication/in-lieu fees standard is 4.5 acres per 1,000 residents (or 0.0045 acres per resident) (City of San Bruno 2015).

Where private open space for park and recreational purposes is provided in a proposed subdivision and such space is privately owned and maintained, the City may give credit (at the time of tentative map or tentative parcel map approval) against the requirement of land dedication and/or payment of fees in lieu if the City finds that it is in the public interest to do so and that the eligibility requirements in Section 12.44.140(C) are met.

3.13.2 Environmental Setting

3.13.2.1 Cañada College

Existing recreational facilities on the Cañada College campus include Building 1, Gymnasium, a baseball field, soccer field, tennis courts, and other passive recreational areas, such as open lawns and gathering spaces. Building 1, Gymnasium, is approximately 39,500 square feet (sf) and is not open for public use but is occasionally used by high school teams and community organizations. The soccer field and baseball field are located southeast of the Gymnasium, and the tennis courts are located north of The Loop Road adjacent to Cañada Vista. The campus also includes undeveloped property, including some wooded areas and open space, in the areas surrounding the campus to the north, west, and east. These recreational facilities and open spaces are used by students at all three District community colleges, as well as by the public and community sports teams.

Existing recreational facilities in the surrounding region include: Emerald Hills Golf Course located north of the Cañada College campus; areas of County-owned open space, including Edgewood County Park and Huddart County Park located west of the campus; and several Town of Woodside and Redwood City parks, including Barkley Fields and Park, Maddux Park, Stulsaft Park, and Westwood Park located east of the campus.

3.13.2.2 College of San Mateo

Existing recreational facilities on the College of San Mateo (CSM) campus include the Building 8, Gymnasium, a swimming pool complex (Aquatics Center), softball field, baseball field, general sports turf field, track and football stadium, tennis courts, and other passive recreational areas, such as open lawns and gathering spaces. Building 8, Gymnasium, is approximately 56,000 sf. Building 5, Wellness, is a fitness/wellness facility that is used by a total of approximately 5,600 members, including faculty, staff, student, and public members. The baseball field, general sports turf field, track and football stadium, and tennis courts are located in the eastern portion of the campus across East Perimeter Road. The campus includes undeveloped property, including some wooded areas and open space, in the areas surrounding the campus. These recreational facilities and open spaces are used by students at all three District community colleges, as well as by the public and community sports teams.

Existing recreational facilities in the surrounding region include: Peninsula Golf and Country Club located northwest of the CSM campus; Crystal Springs Regional Trail located west of the campus; and several City of San Mateo parks, including Laurelwood Park and Beresford Park, located south and east of campus, respectively.

3.13.2.3 Skyline College

The Project's proposed residential complex at Skyline College would generate a new residential population in the City of San Bruno that would likely use the City's parks facilities. A discussion of the existing parks in the City of San Bruno is provided below.

City of San Bruno

The City of San Bruno provides a total of 72 acres of City parkland, including 5 small pocket parks, 12 neighborhood parks, and 1 large community park (City of San Bruno 2008). In addition to City parks, local recreation centers, school facilities, and regional parks provide additional recreational opportunities for San Bruno residents. The southern portion of the city encompasses the 108-acre regional San Mateo County's Junipero Serra Park. **Table 3.13-1** presents the acreage of the parks and open spaces provided in the city.

Table 3.13-1. City of San Bruno Park Facilities

Parks	Acres
Pocket Parks	
Catalpa Tot Lot	0.5
Earl and Glenview Park	0.3
Herman Tot Lot	0.25
Lomita Park	0.25
Posy Park	0.25
Neighborhood Parks	
Bayshore Circle Park	1
Buckeye Park	7
Commodore Park	4
Fleetwood Tot Lot	0.5
Forest Lane Park	4
Grundy Park	4
Leon's Field Park	3
Monte Verde Park	5
Pacific Heights Park	5
Ponderosa Park	4
Seventh Avenue Park	0.5
Seventh and Walnut Park	1
Community Parks	
City Park	31
Total City Parkland	**72 acres**
San Mateo County Parks	
Junipero Serra Park	108
Total City and County Parkland	**180 acres**

Source: City of San Bruno 2008.

As discussed in Section 3.13.1.3, the City maintains a parkland dedication/in lieu fees standard of 4.5 acres per 1,000 residents, which is also the parkland standard established in the City's general plan. With a current population of 44,409 persons and 72 acres of existing park facilities, there are approximately 1.6 acres of parkland per 1,000 residents. However, if Junipero Serra Park is included in the parkland standard calculations, there are 2.4 acres of parkland per 1,000 residents. The City does not currently meet the established parkland goal of 4.5 acres per 1,000 residents.

Skyline College Recreational Facilities

Existing recreational facilities on the Skyline College campus include the Gymnasium (Building 3), a general sports field, soccer field, baseball field, tennis courts, track and field, and other passive recreational areas, such as open lawns and gathering spaces. Building 3, Gymnasium, is an indoor athletic complex that was completely renovated from 2004 to 2006 for modernization and seismic retrofit but it is not open for public use. The general sports field, soccer field, baseball field, tennis courts, and track and field are located in the eastern portion of the campus. The campus includes undeveloped property, including some wooded areas and open space near Vista Point in the southwest portion of the campus. These recreational facilities and open spaces are used by students at all three District community colleges, as well as by the public and community sports teams.

Existing recreational facilities in the surrounding region include the Golden Gate National Recreation Area and associated trails, located south and west of the Skyline College campus, and several parks located in Pacifica and San Bruno. Parks within Pacifica that are located within the vicinity of the campus include Fairway Park, Skyridge Park, and Sharp Park (managed by the City and County of San Francisco Recreation and Parks Department). There are four City of San Bruno parks located within 1 mile of the campus, including Ponderosa Park, Pacific Heights Park, Monte Verde Park, and Fleetwood Park.

3.13.3 Impacts Analysis

3.13.3.1 Methodology

The analysis of the Project's recreation impacts considers the increase in demand for parks and open space associated with the Project and whether the increased demand could be accommodated by existing facilities and/or new facilities provided as part of the Project. Information used to assess the impacts on existing recreational facilities in the surrounding region of the campuses was obtained directly from available public information.

3.13.3.2 Significance Criteria

The State CEQA Guidelines Appendix G (14 CCR 15000 et seq.) has identified significance criteria to be considered for determining whether a project could have significant impacts on existing recreation.

An impact would be considered significant if construction or operation of the Project would have any of the following consequences.

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

3.13.3.3 Impacts and Mitigation Measures

Cañada College

Impact CC-REC-1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated (no impact)

The existing recreational facilities at Cañada College currently have sufficient capacity to serve the college's student and staff population. The Project improvements would not induce population growth or increase the student enrollment or capacity at Cañada College. Therefore, the Project would not increase the use of existing neighborhood and regional parks or other recreational facilities that would result in the substantial deterioration of such facilities. There would be no impact.

Impact CC-REC-2: Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment (less than significant)

The Project involves the demolition of the existing 39,500 sf Building 1, Gymnasium, and the construction of a new two-story, approximately 85,000 sf Building 1, Kinesiology/Wellness, within the same general footprint as the existing building. The replacement structure would include recreational facilities, two 25-meter swimming pools, and a health club; both the pools and the health club would be open to public memberships in addition to use by students, staff, and faculty. It is anticipated that the health club and pools would be used by up to a total of 6,000 people. Construction-related and operational impacts (e.g., increased emissions, noise, traffic, and light) are addressed in other resource sections of this chapter and are less than significant or mitigated to a less-than-significant level. The new Building 1, Kinesiology/Wellness facility would not result in any adverse physical environmental impacts. Therefore, this impact would be less than significant. No mitigation is required.

College of San Mateo

Impact CSM-REC-1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated (no impact)

The existing recreational facilities at CSM currently have sufficient capacity to serve the college's student and staff population. The Project improvements would not induce population growth or increase the student enrollment or capacity at CSM. Therefore, the Project would not increase the use of existing neighborhood and regional parks or other recreational facilities that would result in the substantial deterioration of such facilities. There would be no impact.

Impact CSM-REC-2: Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment (less than significant)

The Project includes the demolition of the existing 56,000 sf Building 8, Gymnasium, and the construction of a new two-story, approximately 75,000 to 80,000 sf Building 8, Gymnasium within approximately the same footprint as the existing building. This replacement recreational structure

would not introduce a new program or a new population of students to the campus. Construction-related and operational impacts (e.g., increased emissions, noise, traffic, and light) are addressed in other resource sections of this chapter and are less than significant or mitigated to a less-than-significant level. The new Gymnasium facility would not result in any adverse physical environmental impacts. Therefore, this impact would be less than significant. No additional mitigation is required.

Skyline College

Impact SC-REC-1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated (less than significant with mitigation)

The existing recreational facilities at Skyline College currently have sufficient capacity to serve the college's student and staff population. The addition of up to 71 new residential units at the campus (available to college faculty/staff and the general public) could increase the use of existing neighborhood and regional parks or other recreational facilities. Further, it is expected that residents of the new residential complex would use the existing recreational facilities in San Bruno and on the Skyline College campus. There are four City of San Bruno parks located within 1 mile of the campus, including Ponderosa Park, Pacific Heights Park, Monte Verde Park, and Fleetwood Park. As discussed previously, existing recreational facilities on the Skyline College campus—including the recently renovated Gymnasium (Building 3), the general sports field, soccer field, baseball field, tennis courts, track and field, and open space areas—would provide for recreational demands generated by Project-related residential growth. Students and faculty would have access to all campus facilities, and the general public would have access to open space areas and limited access to other campus facilities.

The Project's residential complex would subject to the City of San Bruno's requirement for parkland dedication/in-lieu fees standard for residential subdivisions. Based on the standards set forth in Section 12.44.140(B) of the City's Municipal Code, the Project's 71 housing units (comprised of up to 24 multi-family residential units and up to 47 single-family residential units) would generate a population of approximately 201 persons.[1] At a recreational area standard of 0.0045 acres per person, the Project would be required to dedicate and/or pay the in-lieu fee for approximately 0.9 acres.[2] There are no parks or open space components planned as part of the residential complex. As discussed previously, the City does not currently meet the established parkland goal, and the residential population generated by the Project would contribute to the City's difficulty in meeting this goal. Although the Project could increase the use of existing neighborhood and regional parks or other recreational facilities in the area, the increased use is not expected to be substantial and the existing facilities on and around the campus would offset and accommodate the additional users. In addition, with implementation of **Mitigation Measure SC-REC-1,** which requires the District to dedicate the Project's required parkland and/or pay in-lieu fees to offset impacts to the City of San Bruno's parkland goal, this impact would be less than significant.

[1] Per Section 12.44.140(B) of the San Bruno Municipal Code for the purposes of calculating the dedication of land and/or payment of fees for park and recreational purposes, the average number of persons per household shall be determined as follows: 1) for a single-family or duplex dwelling, 3.0 persons per household; and 2) for a multiple-family dwelling, 2.5 persons per household. Therefore, the Project would generate (3.0 persons/household * 47 single-family units) + (2.5 persons/household * 24 multi-family units) = 201 persons. This population generation rate is different from the population generation rated used in Section 3.11, *Population and Housing*.

[2] 0.9 acres = 201 persons * 0.0045 acres per person.

Mitigation Measure SC-REC-1: Dedicate parkland and/or pay in-lieu fees to City of San Bruno for residential development at Skyline College

The District will dedicate 0.9 acres of parkland or pay the equivalent in-lieu fee to the City of San Bruno in compliance with the City's parkland requirement. If the District sells all or a portion of Surplus Parcel B to a developer or developers, the developer, shall dedicate or pay their fair share of the in-lieu fee.

Impact SC-REC-2: Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment (less than significant)

The Project does not include recreational facilities or require the expansion of existing recreational facilities on the Skyline College campus. Therefore, the Project would not have an adverse physical effect on the environment in terms of construction or expanding recreational facilities. The impact would be less than significant. No mitigation is required.

3.13.3.4 Cumulative Impacts

The Project would not increase enrollment at the colleges and, therefore, would not increase demand for park and recreational facilities. And, because the Project also would not remove park or recreational facilities, it would not result in overuse of the facilities by reducing their availability. The proposed Health Club and pool at Cañada College would be open to public membership, providing new recreational opportunities for residents of the surrounding area.

The residential component of the Skyline College proposal would increase demand for park and recreational land in San Bruno. San Bruno Municipal Code Section 12.44.140 (Dedication of land for park and recreational purposes) requires new subdivisions to either dedicate a portion of their site or pay in-lieu fees, depending on the size of the subdivision, for park and recreational facilities. This would be imposed on future subdivision of Surplus Parcel B.

As a result of the above considerations, the project would not contribute to any cumulative impact on recreation. No further analysis is necessary.

3.14 Transportation and Traffic

This section describes the regulatory and environmental setting for transportation and traffic. It also describes impacts on transportation and traffic that would result from implementation of the Project and mitigation for significant impacts, where feasible and appropriate. The section was prepared by Hexagon Transportation Consultants.

3.14.1 Regulatory Setting

The following regulations are relevant to transportation and traffic and apply to implementation of the Project on all three campuses, unless otherwise specified.

3.14.1.1 Federal

There are no relevant federal regulations for identifying environmental effects of the Project on transportation and traffic.

3.14.1.2 State

There are no relevant state regulations for identifying environmental effects of the Project on transportation and traffic.

3.14.1.3 Local

As stated in Section 2.6 of Chapter 2, *Project Description*, the District is exempt from the application of city and county zoning ordinances, except the proposed residential complex at Skyline College because it is a non-educational use. However, the current zoning and applicable general plan provisions for each campus are provided for informational purposes.

Congestion Management Program

The City/County Association of Governments of San Mateo County (C/CAG) is responsible for maintaining the performance and standards of the Congestion Management Program (CMP) roadway system in the County. C/CAG requires new development projected to add 100 or more peak-hour trips to the CMP roadway network to implement trip reduction measures that would reduce project trips. The Project would not add more than 100 peak-hour trips to the CMP roadway network in the vicinity of the campuses. Therefore, preparation of a trip reduction plan in accordance with the C/CAG trip reduction checklist is not required.

Redwood City General Plan

Although the District is not subject to City zoning regulations, the District has chosen to rely on the following Redwood City General Plan (2010) transportation and traffic policy for identifying environmental effects of the Project at Cañada College (Redwood City 2010).

> **Program BE-55: LOS Policy Evaluation.** Maintain level of service (LOS) D or better for intersections in all areas of the city, except the downtown area as defined by the Downtown Precise Plan.

The campuses are located outside of the Redwood City downtown plan area. Therefore, level of service (LOS) D will be the threshold for significance.

Town of Woodside General Plan

There are no relevant Woodside regulations for identifying environmental effects of the project at Cañada College on transportation and traffic.

Based on the Woodside General Plan (2012), an analysis of the present traffic volume on roads in the Woodside planning area indicates that most roads are being used far below their traffic capacity. Since land uses in Woodside are generally built-out, large future increases in traffic volume are not expected, as reflected in the Circulation Element's Table CL2: 2030 Vehicle Traffic Projections (Town of Woodside 2012).

City of San Mateo General Plan

There are no relevant City of San Mateo regulations for identifying environmental effects of the project at College of San Mateo (CSM) on transportation and traffic because the Project is not expected to alter the transportation facilities or generate new vehicle trips on the surrounding roadway network. The San Mateo General Plan Circulation Element does not project substantial increases in traffic congestion on local streets (City of San Mateo 2010).

City of San Bruno General Plan

Although the District is not subject to City zoning regulations, the District has chosen to rely on the following San Bruno General Plan (2009) transportation and traffic policy for identifying environmental effects of the Project at Skyline College (San Bruno 2009).

> **Policy T-B and T-6.** Maintain acceptable levels of service for vehicular movement along the city's street network. Acceptable level of service could vary based on characteristics of the area under consideration.

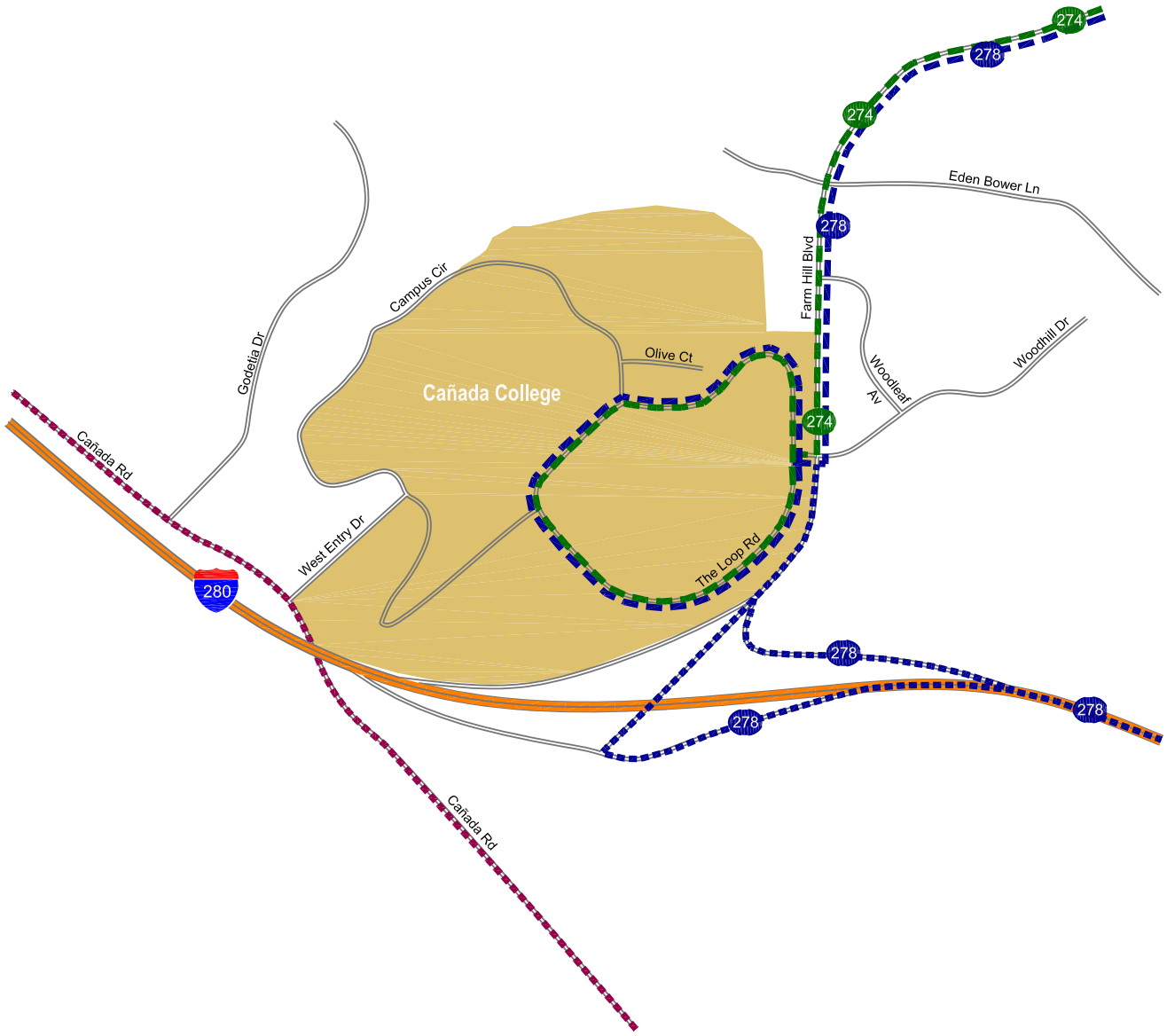
LOS D is the standard for the Skyline Boulevard/College Drive intersection near Skyline College.

3.14.2 Environmental Setting

This section provides a discussion of the existing conditions related to transportation and traffic at the campuses and the surrounding area. The study area for transportation and traffic impacts is defined as the surrounding street network, and transit, pedestrian, and bicycle facilities in the vicinity of the campus for which the operation could be potentially affected by implementation of the Project. Existing transportation facilities in the vicinity of the three colleges are shown in **Figures 3.14-1a** through **3.14-1c**.

3.14.2.1 Cañada College

The Cañada College campus boundaries fall within both Redwood City and Woodside. Regional access to the college is provided by Interstate 280 (I-280) via the Farm Hill Boulevard interchange. The college is accessed via the main entrance on Farm Hill Boulevard on the south side of the campus and via a back entrance on Cañada Road on the west side of campus. Existing transportation facilities in the vicinity of the college (**Figure 3.14-1a**) are described in the following sections.



LEGEND

= Cañada College Campus

= Class II Bicycle Lane

= SamTrans Route 274

= SamTrans Route 278

= SamTrans Route 278 Limited

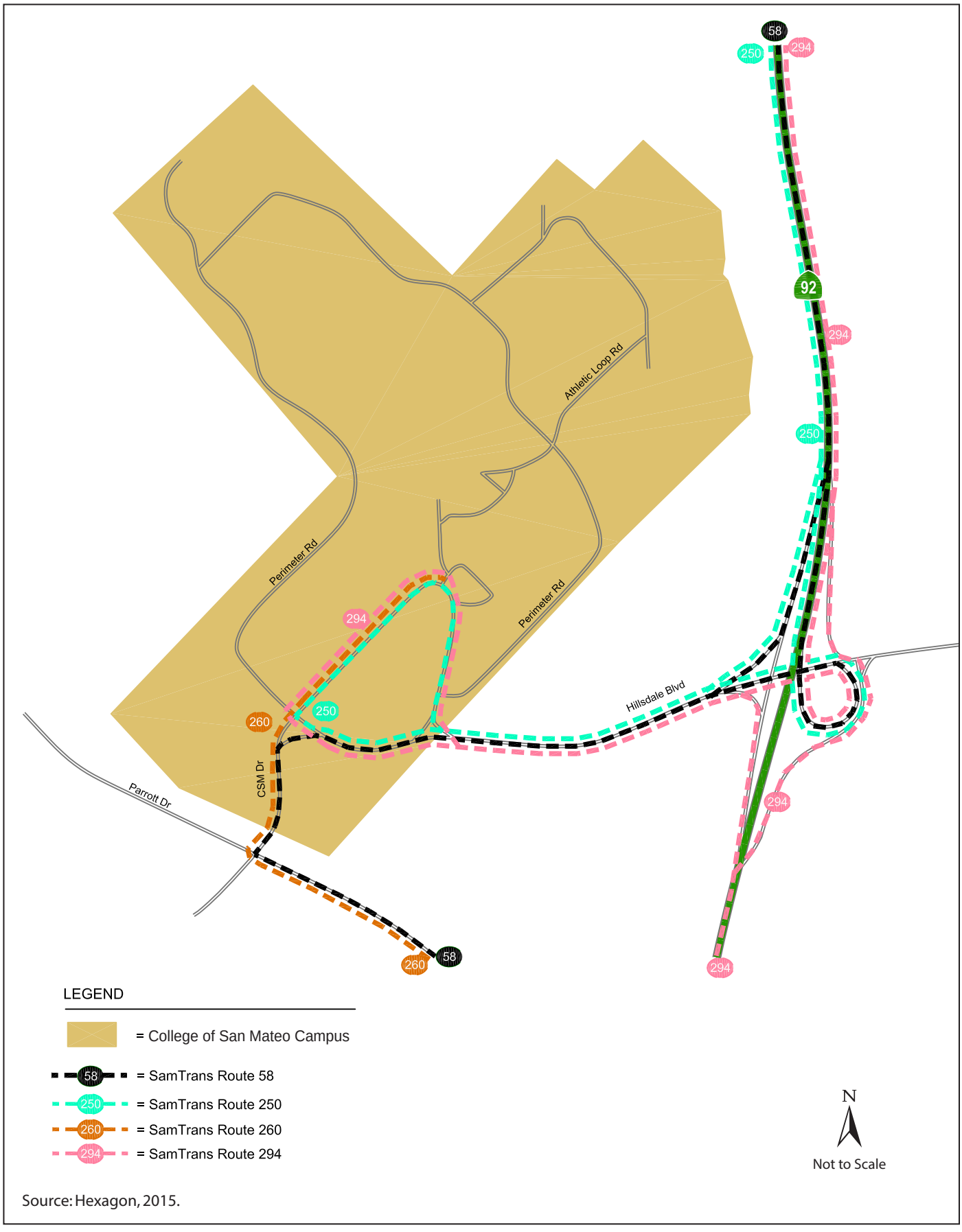
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Source: Hexagon, 2015.

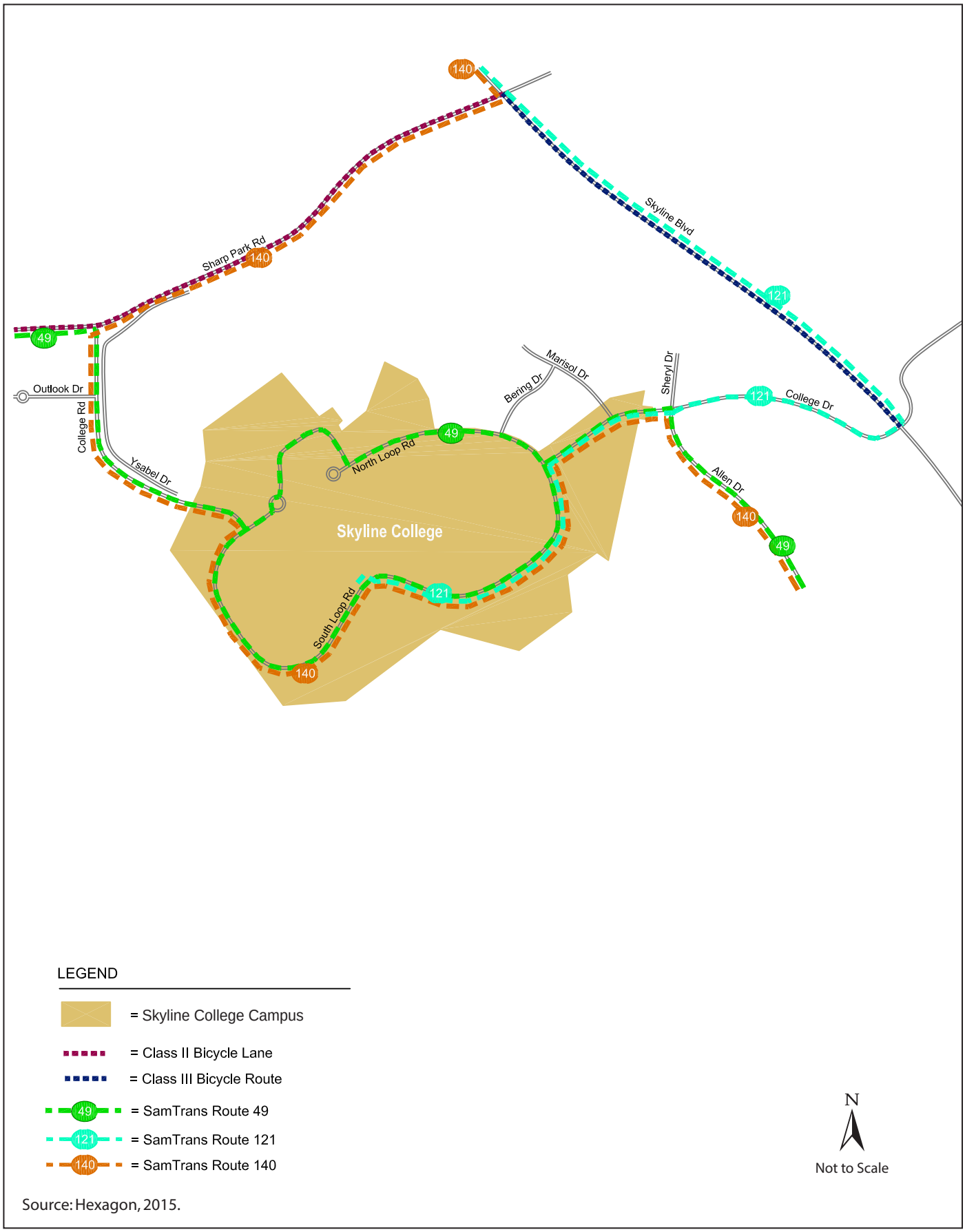
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Figure 3.14-1a
Transportation Facilities near Cañada College



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Figure 3.14-1b
Transportation Facilities near College of San Mateo



Source: Hexagon, 2015.

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Figure 3.14-1c
Transportation Facilities near Skyline College

Roadway Network

I-280 is an eight-lane freeway consisting of four mixed-flow lanes in each direction in the vicinity of the campus. Farm Hill Boulevard is a four-lane arterial running between I-280 in Woodside and Jefferson Avenue in Redwood City. Cañada Road is a two-lane arterial running between State Route (SR) 92 and SR 84. The Loop Road and Campus Circle are the major access roads that run within the campus and between two entrances.

Transit Service

Local transit service in San Mateo County is provided by the San Mateo County Transit District (SamTrans). SamTrans provides two bus routes (274 and 278) between the Redwood City Caltrain Station and Cañada College. Route 274 operates on weekdays, and Route 278 operates on Saturdays. Two bus stops are provided at and near the college: Farm Hill Boulevard at The Loop Road intersection and The Loop Road in front of Building 1 and Cañada College Theater.

Bicycle and Pedestrian Facilities

Class II bicycle lanes (defined as on-street striped bike lanes) exist on Cañada Road in the vicinity of the campus. Sidewalks are present on Farm Hill Boulevard north of Woodhill Drive/The Loop Road with crosswalks provided at the Farm Hill Boulevard/Woodhill Drive intersection (the main college entrance). On Cañada Road, a sidewalk is provided on the east side of the road in the in vicinity of the campus. No crosswalk exists at the Cañada Road/West Entry Drive intersection (the back college entrance).

Traffic Conditions

The Project would replace the existing Building 1, Gymnasium, that currently only supports classroom uses, with a new Building 1, Kinesiology/Wellness, that would have two pools and a health club that would be open to students, staff, faculty, and the general public, which would generate new vehicle trips on the surrounding local streets. Therefore, for identifying the environmental effects of the health club on transportation and traffic, the following two intersections are evaluated (**Figure 3.14-2a**). Both study intersections are in the jurisdiction of Woodside.

- Farm Hill Boulevard and Woodhill Drive (signalized).
- Cañada Road and West Entry Drive (side-street stop-controlled).

Traffic conditions at the study intersections were evaluated using LOS. LOS is a qualitative description of operating conditions ranging from LOS A, free-flow conditions with little or no delay, to LOS F, jammed conditions with excessive delays. Methods used to determine intersection LOS are described in Section 3.14.3.1, *Methodology*.

Existing intersection LOS was calculated based on the peak-hour traffic volumes obtained from turning movement counts and lane configurations and signal phases obtained from the field observations. Turning movement counts were conducted during the AM peak commute period (7 a.m.–9 a.m.) and PM peak commute period (4 p.m.–6 p.m.) on May 12, 2015, when the college was in session. However, because the counts were conducted toward the end of the college semester when some students had dropped out, adjustment was made to the counts on certain movements to reflect the typical student attendance during the early semester. Based on the student counts collected by

the District, the traffic counts were scaled up by 13.8% on the approaches in and out of the campus. Intersection lane configurations and peak-hour intersection turning movement volumes for study intersections are shown on Figure 1 and Figure 2 in **Appendix E,** *Transportation and Traffic Calculations*. The traffic count data are also included in **Appendix E**.

The results of the existing intersection LOS analysis are presented in **Table 3.14-1**. The LOS calculation sheets are included in **Appendix E**. The results indicate that both intersections operate at an acceptable LOS (LOS D or better) during the AM and PM peak hours.

Table 3.14-1. Existing Intersection Levels of Service—Cañada College

Intersection	Traffic Control	Peak Hour	Delay (seconds/vehicle)	LOS
Farm Hill Boulevard and Woodhill Drive	Signal	AM	20.1	C
		PM	17.1	B
Cañada Road and West Entry Drive	Side Street Stop	AM	11.9	B
		PM	11.2	B

Source: Appendix E.

3.14.2.2 College of San Mateo

The College of San Mateo (CSM) is located in the city of San Mateo. Regional access to the campus is provided by SR 92 via the Hillsdale Boulevard interchange. The main entrance to the campus is via West Hillsdale Boulevard on the southeast side of campus. Existing transportation facilities in the vicinity of the campus are described in the following sections and shown on **Figure 3.14-1b**.

Roadway Network

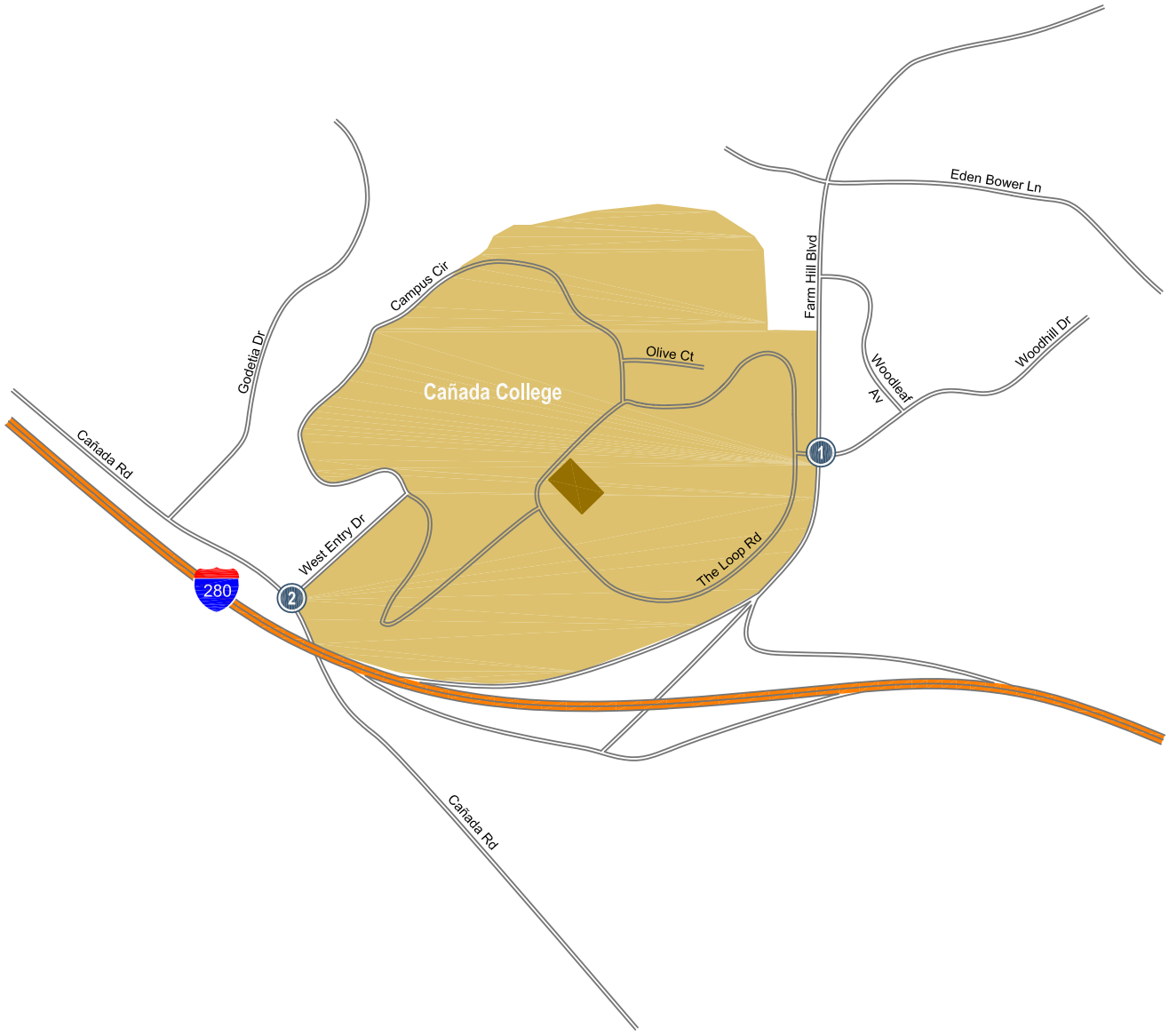
SR 92 is a four-lane freeway, consisting of two mixed-flow lanes in each direction in the vicinity of the campus. West Hillsdale Boulevard is a six-lane arterial between CSM and SR 92 and a two-lane arterial east of SR 92. Perimeter Road is the major loop road that provides access through the campus.

Transit Service

SamTrans provides the following four bus routes (58, 250, 260, and 294) to CSM.

- Route 58 operates on school days only between Borel Middle School and the Polhemus Road/Paul Scannell Drive intersection.
- Route 250 operates between CSM and the San Mateo Caltrain Station.
- Route 260 operates on weekdays between CSM and the San Carlos Caltrain Station.
- Route 294 is an express bus that operates between the San Mateo Medical Center, Hillsdale Caltrain Station, and the Main Street/Poplar Street intersection in Half Moon Bay.

Three bus stops are provided at or near the campus: West Hillsdale Boulevard at Clearview Way, CSM Drive at Parrott Drive, and the CSM Transit Center on campus.



LEGEND

= Cañada College Campus

= Proposed Kinesiology/Wellness (Health Club)

= Study Intersection

N

Not to Scale

Source: Hexagon, 2015.

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Figure 3.14-2a
Study Intersections for Proposed Cañada College Kinesiology/Wellness (Health Club)

Bicycle and Pedestrian Facilities

No designated bikeways currently exist in the vicinity of the campus. Sidewalks are present on West Hillsdale Boulevard with crosswalks provided at the West Hillsdale Boulevard/CSM Drive intersection and the West Hillsdale Boulevard/Clearview Way intersection.

Traffic Conditions

The proposed improvements for the college would not result in the generation of new vehicle trips on the surrounding roadway network. Therefore, the intersection traffic operation analysis as performed for the Cañada College and Skyline College was not required for CSM. Based on the City of San Mateo General Plan traffic projections, CSM contributes to congestion on SR 92, particularly in the morning; however, in 2030, the majority of the signalized intersections in the city of San Mateo, including the intersections serving CSM, would continue to operate at acceptable levels of service (LOS mid-D with an average delay of less than 45 seconds).

3.14.2.3 Skyline College

The Skyline College campus is located in San Bruno. Regional access to the campus is via I-280, which extends north–south approximately 1 mile east of the campus. The main entrances to the campus are provided by Skyline Boulevard via the intersection at College Drive on the east side of campus and by Sharp Park Road via the intersection at College Road on the northwest side of campus. Existing transportation facilities in the vicinity of the campus (**Figure 3.14-1c**) are described in the following sections.

Roadway Network

I-280 is an eight-lane freeway, consisting of four mixed-flow lanes in each direction in the vicinity of the campus. Skyline Boulevard is a four-lane arterial in the vicinity of the campus that runs between I-280 in San Bruno and Sloat Boulevard in San Francisco. Sharp Park Road is a four-lane collector street that runs between SR 1 and Skyline Boulevard. College Drive and College Road are four-lane local streets that run between Sharp Park Road and Skyline Boulevard. South Loop Road and North Loop Road are the major access roads that run within the campus and between the two entrances.

Transit Service

SamTrans provides the following three bus routes (49, 121, and 140) to Skyline College.

- Route 49 operates on school days only between the San Bruno Caltrain Station/SFO AirTrain Station and Terra Nova High School in Pacifica.
- Route 121 operates between Skyline College and the Daly City Bay Area Rapid Transit Station.
- Route 140 operates between the San Bruno Caltrain Station/SFO AirTrain Station and Pacific Manor Shopping Center in Pacifica.

Three bus stops are provided at or near the campus: College Road at Outlook Drive, College Drive at Sheryl Drive/Allen Drive, and South Loop Road in front of Building 2.

Bicycle and Pedestrian Facilities

Class II bicycle lanes (defined as on-street striped bike lanes) exist on Sharp Park Road between SR 1 and Skyline Boulevard, and Class III bicycle routes (defined as on-street signed routes in which bicycles share the roadway with vehicles) exist on Skyline Boulevard between College Drive and Sharp Park Road.

At the east entrance, sidewalks are present on College Drive with crosswalks provided at the College Drive/Sheryl Drive intersection. At the northwest entrance, sidewalks are provided on College Road and Ysabel Drive that runs parallel to College Road, with crosswalks provided at the College Road/Outlook Drive intersection and the College Road/Sharp Park Road intersection.

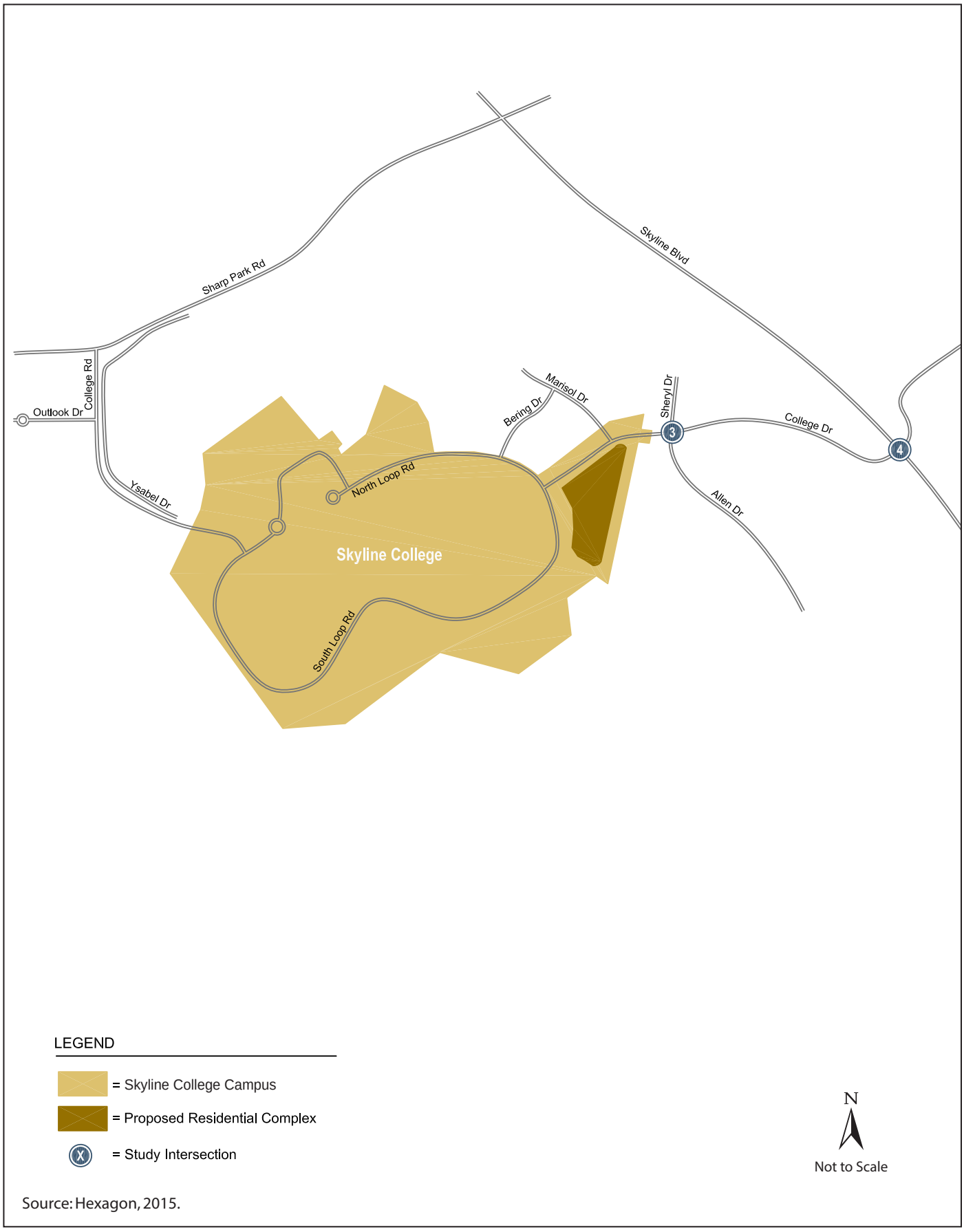
Traffic Conditions

The Project includes a residential complex with up to 71 housing units on a vacant lot located at the southeast corner of the College Drive/South Loop Road intersection at the east entrance. Because the new residential complex would generate new vehicle trips on College Drive and surrounding local streets, the following two intersections on College Drive were evaluated (**Figure 3.14-2b**). Both study intersections are in the jurisdiction of San Bruno.

- Sheryl Drive and College Drive (all-way stop-controlled).
- Skyline Boulevard and College Drive (signalized).

Although the new residential complex is adjacent to the Marisol Drive and College Drive intersection, the intersection is not selected for the study because the layout for proposed driveway locations has not been determined, and it is unknown how the development would affect the layout of the intersection. In addition, based on observations of existing traffic conditions and the small number of trips that would be generated by the development (refer to Section 3.14.3.1, *Methodology*), the intersection currently operates well below capacity, and the Project trips are not expected to degrade the operation to an unacceptable level. The College Road/Sharp Park Road intersection that is located to the northwest side of the campus is not selected for the study because the new development would be on the east side of the campus and directly connected to Skyline Boulevard via College Drive. Therefore, it is not likely that the new development would result in a noticeable traffic increase at the intersection that would otherwise affect the traffic operations at the intersection.

Existing intersection LOS was calculated based on the peak-hour traffic volumes obtained from turning movement counts and lane configurations and signal phases obtained from the field observations. Turning movement counts were conducted during the AM peak commute period (7 a.m.–9 a.m.) and PM peak commute period (4 p.m.–6 p.m.) on May 12, 2015, when the college was in session. However, because the counts were conducted toward the end of the college semester when some students had dropped out, adjustment was made to the counts on certain movements to reflect the typical student attendance during the early semester. Based on the student counts collected by the District, the traffic counts were scaled up by 14.8% on the approaches in and out of the campus. Intersection lane configurations and peak-hour intersection turning movement volumes for study intersections are shown on Figure 1 and Figure 2 in **Appendix E**. The traffic count data are also included in **Appendix E**.



Source: Hexagon, 2015.

Graphics...00234.15 (6-11-2015)

Figure 3.14-2b
Study Intersections for Proposed Skyline College Residential Complex

The results of the existing intersection LOS analysis are presented in **Table 3.14-2**. The LOS calculation sheets are included in **Appendix E**. The results indicate that both intersections operate at an acceptable LOS (LOS D or better) during the AM and PM peak hours.

Table 3.14-2. Existing Intersection Levels of Service—Skyline College

Intersection	Traffic Control	Peak Hour	Delay (seconds/vehicle)	LOS
Sheryl Drive and College Drive	All-Way Stop	AM	10.2	B
		PM	8.9	A
Skyline Boulevard and College Drive	Signal	AM	28.9	C
		PM	12.3	B

Source: Appendix E.

3.14.3 Impacts Analysis

3.14.3.1 Methodology

Level of Service Method

The operations of roadway facilities are described with the term LOS, a scale used to determine the operating quality of a roadway segment or intersection based on volume-to-capacity (v/c) ratio or average delay experienced by vehicles on the facility. As mentioned previously, the levels of congestion identified by LOS range from A to F, with LOS A representing free traffic flow with little or no delay and LOS F representing severe traffic congestion with excessive delays. LOS E represents "at-capacity" operations.

Methods described in the *Highway Capacity Manual* (Transportation Research Board 2000) were used to calculate the LOS for signalized and stop-controlled intersections. LOS for signalized intersections is determined by the average control delay experienced by all vehicles at the intersection. This average delay can then be correlated to an LOS. **Table 3.14-3** summarizes the relationship between delay and LOS for signalized intersections.

For stop-controlled intersections, LOS depends on the average delay experienced by vehicles on the stop-controlled approaches. Thus, for side-street stop-controlled intersections, LOS is based on the average delay experienced by vehicles entering the intersection from the minor (stop-controlled) streets and vehicles making left-turns from the major street. For all-way stop-controlled intersections, LOS is determined by the average delay for all movements through the intersection. The LOS criteria for stop-controlled intersections have different threshold values than those for signalized intersections, primarily because drivers expect different levels of performance from distinct types of transportation facilities. In general, stop-controlled intersections are expected to carry lower volumes of traffic than signalized intersections. Thus, for the same LOS, a lower level of delay is acceptable at stop-controlled intersections than at signalized intersections. **Table 3.14-3** also summarizes the relationship between delay and LOS for stop-controlled intersections.

Table 3.14-3. Level of Service Criteria for Intersections

	Average Delay per Vehicle (seconds/vehicle)	
LOS Designation	Signalized Intersections	Stop-Controlled Intersections
A	≤ 10.0	≤ 10.0
B	10.1 to 20.0	10.1 to 15.0
C	20.1 to 35.0	15.1 to 25.0
D	35.1 to 55.0	25.1 to 35.0
E	55.1 80.0	35.1 to 50.0
F	> 80.0	> 50.0

Source: Transportation Research Board 2000.

For intersection traffic operations, the determination of significance for Project impacts is based on applicable LOS standards and guidelines defined by the local agencies where the study intersections are located. Although Woodside has not defined the limit of acceptable operations, San Mateo has defined the limit of acceptable operations as LOS mid-D, and both Redwood City and San Bruno have defined the limit of acceptable operations as LOS D in their general plans. For this analysis, a significant traffic operation impact at study intersections is said to occur when the addition of new Project traffic would (1) cause traffic operating conditions to deteriorate from an acceptable LOS to an unacceptable LOS, or (2) increase the critical movement delay by 5 or more seconds at intersections operating at LOS E or F. The impacts of the Project were evaluated by comparing the results of the LOS calculations under existing plus project conditions to the results under existing conditions. A similar comparison under cumulative conditions was done to identify cumulative impacts.

Project Trip Estimates

The magnitude of traffic generated by the Project and amount of the traffic added to the roadway network are estimated in this EIR using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. The first step estimates the amount of traffic entering/exiting the Project site as a result of the Project. The second step estimates the directions of travel to and from the Project site. The new trips are then assigned to specific street segments and intersection turning movements during the third step.

As described in Chapter 2, *Project Description*, the Project would not facilitate or cause increases in enrollment or employment, nor contribute to campus growth, because the existing facilities adequately serve the current and anticipated student enrollment and District employment. Therefore, the proposed improvements of the Project would not result in the generation of new vehicle trips on the surrounding roadway network, except two components of the Project that would increase use of a specific campus facility and area of a campus. On the Cañada College campus, Building 1, Kinesiology/Wellness, would be open to public memberships, in addition to use by students, staff, and faculty. At Skyline College, the residential complex would include multi-family housing for staff and faculty and could include single-family housing available to the general public. Therefore, trip generation is estimated for these two Project components.

Cañada College Health Club

The amount of traffic produced by a new development is typically estimated by multiplying together the size of the development and the applicable trip generation rates contained in the Institute of Transportation Engineers *Trip Generation Manual* (ITE Manual) (Institute of Transportation Engineers 2012). However, the ITE Manual does not provide data for a health club that is part of a college facility. Therefore, the trips to be generated by the proposed health club were estimated based on trip generation rates developed using the check-ins and membership data that the District collects at the existing CSM health club. The new Cañada College health club would be operated in similar fashion, so the existing CSM health club is a useful analog for the traffic generation rate at the Cañada College health club. The check-ins data presents the number of members entering the facility by hours of a day for everyday in September 2014. The membership data shows the total enrolled numbers as of September 2014, with the number of members by students, faculty and staff, and public as of January 2015.[1]

Using the check-ins data, total numbers of check-ins and check-outs were calculated for the AM and PM peak hours, which were used to develop trip generation rates using the membership data. It was assumed that faculty, staff, and student members go to the club before and after work or school so they do not generate additional vehicle trips. The trips associated with the general public members were calculated assuming one trip per check-in and per check-out. The estimates of trip generation rates for the CSM health club are summarized in Table 1 in **Appendix E**. It is assumed that the proportion of general public members versus students, staff, and faculty members for the Cañada College health club would be similar to the existing CSM health club. The Cañada College health club is expected to have up to 6,000 club members (including students, faculty and staff, and the general public) and is estimated to generate 815 new daily vehicle trips, including 114 new AM peak-hour vehicle trips (72 inbound and 42 outbound), and 130 new PM peak-hour vehicle trips (75 inbound and 55 outbound). The trip generation estimates are presented in **Table 3.14-4**.

Table 3.14-4. Trip Generation Estimates—Cañada College Health Club

	Units	Weekday	AM Peak Hour[b]			PM Peak Hour[c]		
Land Use	(members)	Daily[a]	In	Out	Total	In	Out	Total
College Health Club	6,000	815	72	42	114	75	55	130

Notes:
Trip rates based on the check-ins and membership data for the existing CSM Health Club.
[a] Weekday daily trip rate = 0.14 trip/member.
[b] AM peak-hour trip rate = 0.02 trip/member, with 63% inbound and 37% outbound.
[c] PM peak-hour trip rate = 0.02 trip/member, with 58% inbound and 42% outbound.
Source: Appendix E, Table 1.

Trip distribution is defined as the directions of approach and departure that vehicles would use to arrive at and depart from a project site. The trip distribution pattern for the Project was based on the locations of complementary land uses and existing travel patterns. The new peak-hour trips generated by the health club were assigned to the study intersections in accordance with the assumed trip distribution pattern. The assumed trip distribution pattern for the Cañada College health club and the assignment of project trips at each study intersection are shown in Figure 3 in **Appendix E**.

[1] The membership breakdown by students, faculty, staff, and the public was not available for the September 2014 membership data. Therefore, the analysis assumes that the membership breakdown in January 2015 was similar to the membership breakdown in September 2014.

Skyline College Residential Complex

Trip generation for the proposed residential complex was estimated by multiplying together the size and uses of the development and the appropriate trip generation rates obtained from the ITE Manual (Institute of Transportation Engineers 2012). The residential complex would include up to 24 multi-family residential units for faculty and staff in the three colleges (Cañada College, CSM, and Skyline College) and up to 47 single-family homes for the general public. Based on average trip generation rates for apartments (Trip Generation Manual Land Use type 220) and single-family detached housing (Trip Generation Manual Land Use type 210), the proposed development would generate 607 daily vehicle trips, including 47 AM peak-hour vehicle trips, and 62 PM peak-hour vehicle trips. Because the 24 multi-family residential units would be open for faculty and staff in the three colleges, it is assumed that 50% of the multi-family residential units would be occupied by Skyline College faculty and staff; therefore, peak-hour commute trips associated with these units are expected to mostly stay within the campus and would not add new trips to the roadway network outside of the campus. The remaining multi-family residential units for Cañada College and CSM faculty and staff and the single-family homes for general public would add new peak-hour trips on the surrounding roadway network. Therefore, adjusted for Skyline College faculty and staff, the development are expected to generate 577 new daily vehicle trips, including 41 new AM peak-hour vehicle trips (10 inbound and 31 outbound), and 54 new PM peak-hour vehicle trips (35 inbound and 19 outbound) to the roadway network outside of the campus. The trip generation estimates are presented in **Table 3.14-5**.

Table 3.14-5. Trip Generation Estimates—Skyline College Residential Complex

Land Use	Units (dus[a])	Weekday Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Multi-family building for faculty and staff[b]	24	160	2	10	12	10	5	15
Single-family homes for general public[c]	47	447	9	26	35	30	17	47
Total Trips Generated		607	11	36	47	40	22	62
Onsite Trips[d]		-30	-1	-5	-6	-5	-3	-8
New Trips on Roadway Network[e]		**577**	**10**	**31**	**41**	**35**	**19**	**54**

Note:

[a] dus = dwelling units.

[b] Based on average trip rates for Apartment (ITE Land Use 220).
Weekday daily trip rate = 6.65 trips/DU.
AM peak-hour trip rate = 0.51 trip/ DU, with 20% inbound and 80% outbound.
PM peak-hour trip rate = 0.62 trip/ DU, with 65% inbound and 35% outbound.

[c] Based on average trip rates for Single-Family Detached Housing (ITE Land Use 210)
Weekday daily trip rate = 9.52 trips/DU.
AM peak-hour trip rate = 0.75 trip/ DU, with 25% inbound and 75% outbound.
PM peak-hour trip rate = 1.00 trip/ DU, with 63% inbound and 37% outbound.

[d] It is assumed that 50% of the multi-family residential units (12) would be occupied by Skyline College faculty and staff and would not generate peak-hour trips on the roadway network.

[e] The remaining residential units would be occupied by Cañada College and CSM faculty, staff, and the general public and would add new trips on the surrounding roadway network.

Source: Institute of Transportation Engineers 2012.

It should be noted that the residential complex is close to the bus stop at the Sheryl Drive/College Drive intersection. The bus stop is served by three bus routes. It is expected that some future residents would use the transit service, which could reduce vehicle trips. However, for a conservative analysis, the transit trip reduction was not applied to the trip estimates.

The trip distribution pattern was estimated based on the locations of complementary land uses and existing travel patterns. The new peak-hour trips generated by the residential complex were assigned to the study intersections in accordance with the assumed trip distribution pattern. The assumed trip distribution pattern for the residential units and the assignment of project trips at each study intersection are shown on Figure 3 in **Appendix E**.

Traffic Operation Analysis Scenarios

Traffic operation impacts of the Cañada College health club and the Skyline College residential complex were evaluated for existing conditions and cumulative conditions. This section describes the traffic analysis scenarios.

- **Existing Conditions.** Existing traffic conditions reflect existing traffic volumes on the existing roadway network. Existing traffic volumes were obtained from recent traffic counts. Existing traffic conditions are discussed in Section 3.14.2, *Environmental Setting*.
- **Existing Plus Project Conditions.** Existing plus project conditions reflect the existing traffic volumes and roadway network with implementation of the Project. Existing plus project traffic volumes were estimated by adding to existing traffic volumes the trips associated with the proposed developments (described in the *Project Trip Estimates* section). Figure 4 in **Appendix E** shows the intersection turning-movement volumes under existing plus project conditions for the Cañada College health club and the Skyline College residential complex. No roadway improvements were proposed as part of the Project; therefore, the existing roadway network was used for existing plus project conditions. Existing plus project conditions were evaluated relative to existing conditions in order to determine potential Project impacts.
- **Cumulative Conditions.** Cumulative conditions reflect future traffic volumes at the date of project occupancy on the future roadway network. The Cañada College health club is expected to open by year 2019, and the Skyline College residential complex is expected to be built and occupied by year 2021. Cumulative traffic volumes are estimated by applying an annual growth rate of 1% to the existing volumes. Based on the site locations and surrounding land uses, no major developments are expected in the vicinity of the project sites; therefore, a 1% growth rate was assumed to account for regional traffic growth in the area. Figure 5 in **Appendix E** shows the intersection turning-movement volumes under cumulative conditions for the Cañada College health club and the Skyline College residential complex. No approved and funded roadway improvements have been identified that would be constructed prior to Project completion. Therefore, the roadway network would be the same as the existing roadway network.
- **Cumulative Plus Project Conditions.** Cumulative plus project conditions reflect the projected traffic volumes with implementation of the Project. The new traffic generated by the Project was added to the traffic volumes from cumulative conditions. Figure 6 in **Appendix E** shows the intersection turning-movement volumes under cumulative plus project conditions for the Cañada College health club and the Skyline College residential complex. No roadway improvements were proposed as part of the Project; therefore, the existing roadway network was used for cumulative plus project conditions. Cumulative plus project conditions were evaluated relative to cumulative conditions in order to determine potential cumulative impacts.

Peak-hour intersection turning movement volumes for all intersections and study scenarios are tabulated in **Appendix E**.

3.14.3.2 Significance Criteria

The State CEQA Guidelines Appendix G (14 CCR 15000 et seq.) has identified significance criteria to be considered for determining whether a project could have significant impacts on existing transportation and traffic.

An impact would be considered significant if construction or operation of the Project would have any of the following consequences.

- 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, highways 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 highways.
- Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.
- 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 new project buildings would not be substantially higher than the existing buildings at each campus, and the modernization and renovation improvements would not change the height of existing buildings. Therefore, the Project would not result in a change in air traffic patterns or otherwise result in a safety risk, and there would be no impacts. Potential impacts on air traffic patterns are not analyzed further.

3.14.3.3 Impacts and Mitigation Measures

Cañada College

Impact CC-TRA-1: Result in an increase in vehicle delay or deterioration of traffic operations during Project operations (less than significant)

The proposed improvements related to demolishing and building the new Building 23, Math/Science/Engineering, modernizing and renovating other buildings, implementing pedestrian improvements, expanding parking lots, and potentially installing renewable energy facilities would not facilitate or result in increases in enrollment, employment, or contribute to campus growth. There is currently adequate parking availability; expanding the parking lots into the unpaved areas and adding more parking is not expected to change the existing parking patterns. Therefore, these

improvements would not generate new vehicle trips or change the existing travel patterns on the roadway network. Accordingly, there would be no traffic operation impact resulting from these improvements. However, the Project would replace the existing Building 1, Gymnasium which currently only supports classroom uses, with a new Building 1, Kinesiology/Wellness, which would have a health club. The health club would be open to students, staff, faculty, and the general public with club membership, which would generate new vehicle trips on surrounding local streets. Therefore, LOS calculations were conducted to evaluate intersection operations with the operation of the Health Club. The results of the analysis are summarized in **Table 3.14-6**. The results indicate that the study intersections are projected to operate within an acceptable LOS (LOS D or better) during the AM and PM peak hours. Accordingly, Project operational impacts at the study intersections would be less than significant. No mitigation is required.

Table 3.14-6. Existing Plus Project Intersection Levels of Service—Cañada College

			Existing		Existing Plus Project	
Intersection	Traffic Control	Peak Hour	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Farm Hill Boulevard and Woodhill Drive	Signal	AM	20.1	C	21.2	C
		PM	17.1	B	18.4	B
Cañada Road and West Entry Drive	Side Street Stop	AM	11.9	B	12.1	B
		PM	11.2	B	11.6	B

Source: Appendix E.

I-280 in the vicinity of the campus is part of the CMP roadway system; however, because the proposed health club is expected to be mostly used by members from the surrounding neighborhoods, it is expected to add only a few trips to I-280. Therefore, Project operational impacts on I-280 would be less than significant. No mitigation is required.

Impact CC-TRA-2: Potentially conflict with transit services and facilities and policies and plans related to the services during Project operations (less than significant)

The Project improvements on the campus would not alter the existing transportation facilities internally and externally; therefore, the improvements would not interrupt the existing transit service on the campus and on roadways surrounding the campus, introduce safety hazards to the transit facilities, or otherwise conflict with local general plans. The proposed health club would potentially increase demand for transit services by the club members. Based on the peak-hour trip estimates that assumed all members driving to the club, it is expected to have approximately 130 public members entering and exiting the club during the PM peak hour. It is expected that some of the members would take buses to campus. However, even with these members taking buses, the Project is not expected to increase the transit demand to a level where it could not be accommodated by existing or planned transit service. Therefore, the impact on transit service and facilities would be less than significant. No mitigation is required.

Impact CC-TRA-3: Potentially conflict with local pedestrian and bicycle facilities and policies and plans regarding the facilities during Project operations (less than significant)

The Project improvements on the campus would not alter the existing transportation facilities internally and externally. In addition, the Project would improve pedestrian circulation and connection in the North Quad between existing Buildings 17 and 22. Therefore, the improvements would not interrupt the existing pedestrian and bicycle facilities on the campus and on roadways

surrounding the campus, introduce safety hazards to the facilities, or otherwise conflict with local general plans. Impacts on pedestrian and bicycle facilities resulting from these improvements would be less than significant. No mitigation is required.

Impact CC-TRA-4: Result in potential construction impacts on traffic operation and circulation, transit service, nonmotorized transportation facilities, and emergency access (less than significant with mitigation)

Transportation system impacts during construction of a development project typically include the potential to disrupt traffic flows on area roadways and the potential to disrupt alternative modes of transportation, such as by blocking bicycle or pedestrian pathways or public transit lanes on area roadways.

The Project's construction activities would be retained within the campus; therefore, construction of the proposed improvements is not expected to result in lane closures that could delay the movement of emergency vehicles, block bicycle or pedestrian pathways, or disrupt transit services on public roadways. During the building demolition and construction phases, disruption to traffic flows on the surrounding roadways could be caused by a higher number of heavy-duty construction vehicles sharing the roadway with normal vehicle traffic, creating potential conflicts between incompatible uses. However, as described in Chapter 2, *Project Description*, the District has committed to developing and implementing a traffic control plan, as needed, during construction (EC-TRA-1, which is repeated as Mitigation Measure CC-TRA-1) to minimize the effects of construction traffic on the surrounding area.

Within the campus, construction activities could result in temporary closures of pedestrian pathways or internal roadways. However, as described in Chapter 2, *Project Description,* a traffic control plan would be developed and implemented to minimize the effects of construction traffic on pedestrians, bicycles, and emergency vehicle access. With implementation of **Mitigation Measure CC-TRA-1**, the temporary construction impacts would be less than significant.

Mitigation Measure CC-TRA-1: Implement a Traffic Control Plan during construction at Cañada College

The District will require the construction contractor(s) to develop a traffic control plan, as appropriate, to minimize the effects of construction traffic on the surrounding area. (A traffic control plan may not be required for minor construction activities.) The plan will be subject to review and approval by the District. The District will be responsible for monitoring to ensure that the plan is effectively implemented by the construction contractor(s). The construction traffic control plan will include the following requirements.

- Provide clearly marked pedestrian detours if any sidewalk or pedestrian walkway closures are necessary.
- Provide clearly marked bicycle detours if heavily used bicycle routes must be closed, or if bicyclist safety might be otherwise compromised.
- Provide crossing guards and/or flag persons as needed to avoid traffic conflicts and ensure pedestrian and bicyclist safety.
- Use nonskid traffic plates over open trenches to minimize hazards.

- Locate all stationary equipment as far away as possible from areas used heavily by vehicles, bicyclists, and pedestrians.
- Notify and consult with emergency service providers and provide emergency access by whatever means necessary to expedite and facilitate the passage of emergency vehicles.
- Avoid routing construction traffic through residential areas to the extent feasible. Prohibit mobilization and demobilization of heavy construction equipment during AM and PM peak traffic hours.
- Provide access for driveways and private roads outside the immediate construction zone by using steel plates or temporary backfill, as necessary.
- Prohibit construction worker parking in residential areas.

College of San Mateo

Impact CSM-TRA-1: Result in a substantial increase in vehicle delay or deterioration of traffic operations during Project operations (no impact)

The proposed improvements related to demolishing and building a new Building 8, Gymnasium, and Building 19, Center for Innovation and Emerging Technologies, modernizing and renovating other buildings, and potentially installing renewable energy facilities would not facilitate or result in increases in enrollment, employment, or contribute to campus growth. Therefore, these improvements would not generate new vehicle trips or change the existing travel patterns on the roadway network. Accordingly, there would be no impact.

Impact CSM-TRA-2: Potentially conflict with transit services and facilities and policies and plans related to the services during project operations (no impact)

The Project improvements on the campus would not alter the existing transportation facilities internally and externally; therefore, the improvements would not interrupt the existing transit service on the campus and on roadways surrounding the campus, introduce safety hazards to the transit facilities, or otherwise conflict with the local general plan. Therefore, there would be no impacts on transit service and facilities resulting from these improvements.

Impact CSM-TRA-3: Potentially conflict with local pedestrian and bicycle facilities and policies and plans regarding the facilities during project operations (no impact)

The Project improvements at the campus would not alter the existing transportation facilities internally or externally; therefore, the improvements would not interrupt the existing pedestrian and bicycle facilities on the campus and on roadways surrounding the campus, introduce safety hazards to the facilities, or otherwise conflict with the local general plan. Accordingly, there would be no impact.

Impact CSM-TRA-4: Result in potential construction impacts on traffic operation and circulation, transit service, nonmotorized transportation facilities, and emergency access (less than significant with mitigation)

The Project's construction activities would be retained within the campus; therefore, construction of the proposed improvements is not expected to result in lane closures that could delay the movement of emergency vehicles, block bicycle or pedestrian pathways, or disrupt transit services on public

roadways. During the building demolition and construction phases, disruption to traffic flows on the surrounding roadways could be caused by a higher number of heavy-duty construction vehicles sharing the roadway with normal vehicle traffic, creating potential conflicts between incompatible uses. However, as described in Chapter 2, *Project Description*, the District has committed to developing and implementing a traffic control plan, as needed, during construction (EC-TRA-1, which is repeated as Mitigation Measure CSM-TRA-1) to minimize the effects of construction traffic on the surrounding area.

Within the campus, construction activities could result in temporary closures of pedestrian pathways or internal roadways. However, as described in Chapter 2, a traffic control plan would be developed and implemented to minimize the effects of construction traffic on pedestrians, bicycles, and emergency vehicle access. With implementation of **Mitigation Measure CSM-TRA-1**, the temporary construction impacts would be less than significant.

Mitigation Measure CSM-TRA-1: Implement a Traffic Control Plan during construction at the College of San Mateo

This measure is the same as Mitigation Measure CC-TRA-1 described under Impact CC-TRA-4, but would be implemented at the College of San Mateo.

Skyline College

Impact SC-TRA-1: Result in a substantial increase in vehicle delay or deterioration of traffic operations during Project operations (less than significant)

The proposed improvements related to demolishing and building new buildings, modernizing and renovating other buildings, implementing pedestrian improvements, expanding parking lots, and potentially installing renewable energy facilities would not facilitate or result in increases in enrollment, employment, or contribute to campus growth. There is currently adequate parking availability; expanding the parking lots into the unpaved areas and adding more parking is not expected to change the existing parking patterns or increase the use. Therefore, these improvements would not generate new vehicle trips or change the existing travel patterns on the roadway network. Accordingly, there would be no traffic operation impact resulting from these improvements. However, the Project would construct a residential complex with up to 71 housing units at a vacant lot (Surplus Parcel B) located at the southeast corner of the College Drive/South Loop Road intersection at the east entrance. The new residential complex would generate new vehicle trips on College Drive and surrounding local streets. Therefore, LOS calculations were conducted to evaluate intersection operations with the residential complex. The results of the analysis are summarized in **Table 3.14-7**. The results indicate that the study intersections are projected to operate within an acceptable LOS (LOS D or better) during the AM and PM peak hours. Accordingly, Project operational impacts at the study intersections would be less than significant. No mitigation is required.

Skyline Boulevard in the vicinity of the college is part of the CMP roadway system; however, the residential complex would only add a maximum of 54 peak-hour trips to Skyline Boulevard, and the new trips would not cause the Skyline Boulevard/College Drive intersection to exceed the San Bruno LOS standard. Therefore, new traffic impacts would be less than significant. No mitigation is required.

Table 3.14-7. Existing Plus Project Intersection Levels of Service—Skyline College

			Existing		Existing Plus Project	
Intersection	Traffic Control	Peak Hour	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Sheryl Drive and College Drive	All-Way Stop	AM	10.2	B	10.3	B
		PM	8.9	A	9.1	A
Skyline Boulevard and College Drive	Signal	AM	28.9	C	30.8	C
		PM	12.3	B	12.7	B

Source: Appendix E.

Impact SC-TRA-2: Potentially conflict with transit services and facilities and policies and plans related to the services during project operations (less than significant)

Project improvements at Skyline College would not alter the existing transportation facilities internally and externally; therefore, the improvements would not interrupt the existing transit service on the campus and on roadways surrounding the college, introduce safety hazards to the transit facilities, or otherwise conflict with the local general plan. The proposed residential complex would potentially increase demand for transit services by future residents. However, based on the relatively small number of residential units, the development is not expected to increase the transit demand to a level where it could not be accommodated by existing or planned transit service. Therefore, the impacts on transit service and facilities are considered less than significant. No mitigation is required.

Impact SC-TRA-3: Potentially conflict with local pedestrian and bicycle facilities and policies and plans regarding the facilities during Project operations (less than significant)

Project improvements at Skyline College would not alter the existing transportation facilities internally and externally. Additionally, the Project would include a new pedestrian connection from the new Building 1, Social Science/Creative Arts Programs, and the existing Lot C to South Loop Road and a new pedestrian connection from the new Building 12, Environmental Sciences, eastward through Lot G to the existing Building 8. The improvements would not interrupt the existing pedestrian and bicycle facilities on campus and on roadways surrounding the campus, introduce safety hazards to the facilities, or otherwise conflict with the local general plan. Impacts on pedestrian and bicycle facilities resulting from these improvements would be less than significant. No mitigation is required.

Impact SC-TRA-4: Result in potential construction impacts on traffic operation and circulation, transit service, nonmotorized transportation facilities, and emergency access (less than significant with mitigation)

The Project's construction activities would be retained within the campus; therefore, construction of the proposed improvements is not expected to result in lane closures that could delay the movement of emergency vehicles, block bicycle or pedestrian pathways, or disrupt transit services on public roadways. During the building demolition and construction phases, disruption to traffic flows on the surrounding roadways could be caused by a higher number of heavy-duty construction vehicles sharing the roadway with normal vehicle traffic, creating potential conflicts between incompatible uses. However, as described in Chapter 2, *Project Description*, the District has committed to developing and implementing a traffic control plan, as needed, during construction (EC-TRA-1, which is repeated as Mitigation Measure SC-TRA-1) to minimize the effects of construction traffic on the surrounding area.

Within the campus, construction activities could result in temporary closures of pedestrian pathways or internal roadways. However, as described in Chapter 2 and below, a traffic control plan would be developed and implemented to minimize the effects of construction traffic on pedestrians, bicycles, and emergency vehicle access. With implementation of **Mitigation Measure SC-TRA-1**, the temporary construction impacts would be less than significant.

Mitigation Measure SC-TRA-1: Implement a Traffic Control Plan during construction at Skyline College

This measure is the same as Mitigation Measure CC-TRA-1 described under Impact CC-TRA-4, but would be implemented at Skyline College.

3.14.3.4 Cumulative Impacts

The cumulative impact analysis utilizes the plan/program approach, based on the general plans for the cities in which the campuses are located, with an assumed one-percent growth rate to account for regional traffic growth in the area. The local general plans constitute the future development patterns for their respective cities. Therefore, they are suitable for projecting future land use and traffic generation.

Cañada College

Cumulative impacts were evaluated for the implementation of the Cañada College health club because it would generate new vehicle trips that would potentially affect traffic operations on the surrounding roadway network. Cumulative traffic impacts on the study intersections were evaluated for the year the health club is scheduled to open (2019). A growth rate of 1% per year, compounded annually, was applied to the existing intersection traffic volumes (year 2015) to account for regional traffic growth. Traffic volume projections and the analysis scenarios for cumulative impacts are described in Section 3.14.3.1, *Methodology*.

LOS calculations were conducted to evaluate intersection operations with the operation of the Cañada College health club. The results of the analysis are summarized in **Table 3.14-8**. The results indicate that the study intersections are projected to operate within an acceptable LOS (LOS D or better) during the AM and PM peak hours. Accordingly, the Project's cumulative operational impacts at the study intersections would be less than significant. No mitigation is required.

Table 3.14-8. Cumulative Plus Project Intersection Levels of Service—Cañada College

			Cumulative		Cumulative Plus Project	
Intersection	Traffic Control	Peak Hour	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Farm Hill Boulevard and Woodhill Drive	Signal	AM	20.3	C	21.5	C
		PM	17.1	B	18.4	B
Cañada Road and West Entry Drive	Side Street Stop	AM	12.2	B	12.4	B
		PM	11.3	B	11.8	B

Source: Appendix E.

College of San Mateo

The proposed improvements on the CSM campus would not facilitate or result in increases in enrollment, employment, or contribute to campus growth. Therefore, these improvements would not contribute new vehicle trips or change the existing travel patterns on the roadway network. Therefore, there would be no cumulative traffic impact resulting from these improvements.

Skyline College

Cumulative impacts were evaluated for the implementation of the Skyline College residential complex because it would generate new vehicle trips that could potentially affect traffic operations on the surrounding roadway network. Cumulative traffic impacts on the study intersections were evaluated for the year the residential complex is scheduled to open (2021). A growth rate of 1% per year, compounded annually, was applied to the existing intersection traffic volumes (year 2015) to account for regional traffic growth. Traffic volume projections and the analysis scenarios for cumulative impacts are described in Section 3.14.3.1, *Methodology*.

LOS calculations were conducted to evaluate intersection operations with the residential complex. The results of the analysis are summarized in **Table 3.14-9**. The results indicate that the study intersections are projected to operate within an acceptable LOS (LOS D or better) during the AM and PM peak hours. Accordingly, the Project's cumulative operational impacts at the study intersections would be less than significant. No mitigation is required.

Table 3.14-9. Cumulative Plus Project Intersection Levels of Service—Skyline College

			Cumulative		Cumulative Plus Project	
Intersection	Traffic Control	Peak Hour	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Sheryl Drive and College Drive	All-Way Stop	AM	10.5	B	10.7	B
		PM	9.0	A	9.2	A
Skyline Boulevard and College Drive	Signal	AM	39.6	D	41.9	D
		PM	12.8	B	13.2	B

Source: Appendix E.

Chapter 4
Other CEQA-Required Discussions

This chapter includes the following other discussions and analyses required by CEQA.

- Cumulative impacts.
- Significant and unavoidable impacts.
- Significant irreversible environmental changes.
- Growth-inducing impacts.

4.1 Cumulative Impacts

4.1.1 Approach to Impact Analysis

4.1.1.1 Legal Requirements

State CEQA Guidelines require that the cumulative impacts of a project be addressed in an EIR when the cumulative impacts are expected to be significant and when the project's incremental effect is cumulatively considerable (State CEQA Guidelines Section 15130[a]). Cumulative impacts are impacts on the environment that result from the incremental impacts of a proposed action when added to other past, present, and reasonably foreseeable future actions (State CEQA Guidelines Section 15355[b]). Such impacts can result from individually minor but collectively significant actions taking place over time.

CEQA Guidelines Section 15130 states that the discussion of cumulative impacts need not provide as much detail as the discussion of effects attributable to the project alone. The level of detail should be guided by what is practical and reasonable.

4.1.1.2 Methodology

According to the State CEQA Guidelines Section 15130, an adequate discussion of significant cumulative impacts should contain the following discussions.

- An analysis of related future projects or planned development that would affect resources in the project area similar to those affected by the project.
- A summary of the expected environmental effects to be produced by those projects, with specific reference to additional information stating where that information is available.
- A reasonable analysis of the cumulative impacts of the relevant projects.

An EIR must examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative impacts.

When evaluating cumulative impacts, CEQA recommends one of the following two methods:

1. The cumulative analysis would consider any past, present, and probable future projects producing related or cumulative impacts, including projects outside the control of the lead agency (i.e., project list approach).
2. The cumulative analysis would consider projections contained in an adopted local, regional, or statewide plan, or would use a prior environmental document which has been adopted or certified for such a plan (i.e., plan approach).

The present EIR uses the latter approach. The adopted general plans for Redwood City, Woodside, San Mateo, and San Bruno are used as the basis for consideration of reasonably probable future projects for most of the resource topics. Exceptions include air quality and energy, and greenhouse gas emissions, which use the plans of the Bay Area Air Quality Management District; hydrology and water quality, which uses the basin plan of the Bay Area Regional Water Quality Control Board and the California Water Plan; and transportation and traffic, which uses the traffic projections contained in the regional traffic model.

There is not a significant cumulative impact for each resource topic. Further, there may be significant cumulative impacts to which the Project would not contribute.

The cumulative analysis is limited to those impacts that are cumulatively significant and to which the Project would contribute. Put another way, where the Project, in conjunction with past, present, and reasonably probable future projects, would not result in a significant cumulative impact, no analysis is undertaken. Where there is the potential for a significant cumulative impact, the Project's incremental contribution to that impact is examined to determine whether the contribution is considerable. If a contribution is found to be feasible, the EIR recommends mitigation to reduce the Project's contribution, when feasible.

4.1.2 Analysis of Cumulative Impacts

No significant cumulative impacts exist in the area for the following resources: noise, public services/utilities, and recreation. Therefore, these resources will not be discussed further in this context.

The cumulative impact analysis for each of the resource topics (aesthetics; air quality and energy; biological resources; cultural resources; geology, soils and paleontology; greenhouse gas emissions; hazards and hazardous materials; hydrology and water quality; land use and planning; population and housing; transportation and traffic) describes the potential for the Project, in combination with the cumulative projects, to result in cumulatively significant environmental impacts. Each analysis considers the cumulative setting of the potential impacts. The evaluations identify whether the cumulative impact would be significant, and whether the Project's contribution to a significant cumulative impact would be considerable. The cumulative impact analyses are found in the respective resource sections of the EIR. Overall, with Project mitigation, the Project's contribution to cumulative impacts would not be substantial and, thus, would be less than significant.

4.2 Significant and Unavoidable Impacts

Section 21067 of CEQA and Sections 15126(b) and 15126.2(b) of the State CEQA Guidelines require that an EIR describe any significant impacts, including those that can be mitigated but not reduced to a less-than-significant level. Furthermore, when there would be impacts that cannot be alleviated without imposing an alternative design, the implications of such impacts and the reasons why the Project is being proposed should be described.

Table 4-1 shows the significant and unavoidable impact resulting from Project implementation and mitigation measures that would be required but would not reduce the impact to a less-than-significant level. This impact is related to the exposure of offsite sensitive receptors to construction-related diesel particulate matter (DPM) and fine particulate matter (PM2.5) at the College of San Mateo.

Due to this significant unavoidable environmental impact, approval of the Project would require that a Statement of Overriding Considerations be adopted, indicating that the District is aware of the significant environmental consequences and believes that the benefits of approving the Project outweigh its unavoidable significant environmental impact.

Table 4-1. Significant and Unavoidable Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation	Significance after Mitigation
Impact CSM-AQE-5: Expose existing sensitive receptors to substantial pollutant concentrations during construction	Significant	CSM-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo CSM-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at the College of San Mateo CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at the College of San Mateo CSM-AQE-6: Install filtration systems on ventilation and recirculation systems at the College of San Mateo	Significant and unavoidable

4.3 Significant Irreversible Environmental Changes

Section 15126.2(c) of the State CEQA Guidelines requires that an EIR consider any significant irreversible environmental changes that would be caused by the Project should it be implemented. Section 15126.2(c) reads as follows.

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

A project would result in significant irreversible environmental changes if any of the following criteria are met.

- The primary and secondary impacts would generally commit future generations to similar uses.
- The project would involve a large commitment of nonrenewable resources.
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project.
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

The environmental effects of the Project are analyzed in detail in the resource sections of Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures*, of this EIR.

4.4 Growth-Inducing Impacts

Section 21100(b)(5) of CEQA requires an EIR to discuss how a project, if implemented, may induce growth and the impacts of that induced growth (see also State CEQA Guidelines Section 15126). CEQA requires the EIR to discuss specifically "the ways in which the Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment" (State CEQA Guidelines Section 15126.2[d]). The State CEQA Guidelines do not provide specific criteria for evaluating growth inducement and state that "it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment." CEQA does not require separate mitigation for growth inducement, as it is assumed that these impacts are already captured in the analysis of environmental impacts (see Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures*). Furthermore, the State CEQA Guidelines require that an EIR "discuss the ways" a project could be growth inducing and that it "discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment."

According to the State CEQA Guidelines, a project would have potential to induce growth if it would have either of the following consequences:

- Remove obstacles to population growth (e.g., through the expansion of public services into an area that does not currently receive these services), or through the provision of new access to an area, or a change in a restrictive zoning or general plan land use designation.
- Result in economic expansion and population growth through employment opportunities and/or construction of new housing.

In general, a project could be considered growth-inducing if it directly or indirectly affects the ability of agencies to provide needed public services or if it can be demonstrated that the potential growth significantly affects the environment in some other way. However, the State CEQA Guidelines do not require a prediction or speculation of where, when, and in what form such growth would occur (Section 15145).

4.4.1 Economic, Population, and Housing Growth

Typically, the growth-inducing potential of a project is considered significant if it fosters growth or a concentration of population in a different location or in excess of what is assumed in pertinent general plans or land use plans, or projections made by regional planning agencies such as the Association of Bay Area Governments (ABAG). Section 3.11., *Population and Housing*, summarizes the cumulative impacts of direct population growth as a result of development on each campus.

4.4.1.1 Cañada College

As described in Chapter 2, *Project Description*, the Project includes the construction of two new buildings, the renovation of five buildings, one pedestrian improvement, the expansion of two parking lots, and the installation of up to two renewable energy facilities. The Project would not cause a significant environmental impact through inducement of population growth (refer to Section 3.11, *Population and Housing*). The Project is not expected to result in new permanent jobs and would not be growth inducing as a result of new jobs that would indirectly bring a new population to the campus.

Construction of the Project would be temporary and typically utilize local labor or commuting labor. It would not induce construction workers to relocate to the area and, therefore, would not be growth inducing.

4.4.1.2 College of San Mateo

As described in Chapter 2, *Project Description*, the Project includes the construction of two new buildings, the renovation of six buildings and the Corporation Yard, and the installation of up to seven renewable energy facilities. No new permanent jobs would be created by the Project. The Project would not cause a significant environmental impact through inducement of population growth (refer to Section 3.11, *Population and Housing*).

Construction of the Project would be temporary and typically utilize local labor or commuting labor. It would not induce construction workers to relocate to the area and, therefore, would not be growth inducing.

4.4.1.3 Skyline College

As described in Chapter 2, *Project Description*, the Project includes the construction of four new buildings, the construction of a residential complex, the renovation of three buildings, two pedestrian improvements, the expansion of one parking lot, and the installation of up to two renewable energy facilities. No new permanent jobs would be created by the Project.

The Project would result in the construction of up to 71 new residences in San Bruno. This would directly result in residential growth over existing conditions. These residences would contribute to expected growth within the city. As discussed in Section 3.11, *Population and Housing*, the total Regional Housing Needs Assessment for San Bruno, which defines the city's housing need during the period of 2014–2022, is 1,155 new housing units. The proposed residential complex would assist the City in meeting that need.

Construction of the Project would be temporary and typically utilize local labor or commuting labor. It would not induce construction workers to relocate to the area and, therefore, would not be growth inducing.

Chapter 5
Alternatives

5.1 Development of Alternatives

CEQA requires that an EIR examine a reasonable range of feasible alternatives to the project or the project location that could substantially reduce one or more of the project's significant environmental impacts while meeting most or all of its objectives. The EIR is required to analyze the potential environmental impacts of each alternative, though not at the same level of detail as the project. However, there must be sufficient detail to be able to compare the respective merits of the alternatives. The key provisions of State CEQA Guidelines Section 15126.6 that relate to alternatives analyses are summarized below.

- The discussion of alternatives shall focus on alternatives to the project or project location that are feasible, would meet most or all of the project objectives, and would substantially reduce one or more of its significant impacts.
- The range of alternatives must include the No Project Alternative. The No Project analysis will discuss the existing conditions at the time the Notice of Preparation (NOP) was published, as well as conditions that would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. The No Project Alternative is not required to be feasible, meet any of the project objectives, or reduce the project's expected impacts to any degree.
- The range of alternatives required is governed by a rule of reason. The EIR must evaluate only those alternatives necessary to permit a reasoned choice. An EIR is not required to analyze every conceivable alternative to a project.
- An EIR does not need to consider an alternative that would not achieve the basic project objectives, for which effects cannot be reasonably ascertained, and for which implementation is remote and speculative.

5.1.1 Alternative Selection Process

The Project involves future improvements at three campuses in three separate locations within San Mateo County. As described in Chapter 2, *Project Description*, the Project would comply with the sustainability plans adopted by the District for each of the campuses and incorporates a number of environmental commitments intended to minimize the impacts of construction. The following description examines a project alternative and a no project alternative for each of the three campuses. The District has developed a potentially feasible alternative for each campus that would reduce one or more of its significant impacts.

The NOP for the Project was available for review and comment between May 5 and June 3, 2015. No suggestions for alternatives were received in response to the NOP.

When developing a reasonable range of alternatives to the Project, the District considered the following:

- Project objectives.
- Significant impacts of the Project.

This chapter includes a description of how the Project alternatives were developed, evaluation of the alternatives in comparison with the Project, and identification of the environmentally superior alternative. The District may choose to separately approve the Project's improvements on a college-by-college basis. For that reason, this EIR examines college-specific alternatives rather than an alternative to the Project as a whole. The Project has one significant and unavoidable impact related to exposure of offsite sensitive receptors to construction related diesel particulate matter (DPM) and fine particulate matter (PM2.5) at the College of San Mateo. At Cañada College and Skyline College, the alternatives for this Project would not be necessary in order to avoid significant impacts, but instead would further reduce the intensity of Project impacts that would be less than significant with mitigation.

5.1.2 Project Objectives

The master plan improvements at each of the campuses share a common set of Project objectives. To better serve approximately the same number of current students and staff at each campus and to prepare students for universities and high-demand jobs, the District plans to provide modern facilities and technology for the foreseeable future; improve access for disabled students; ensure classrooms meet earthquake, fire, and other safety requirements; replace aging infrastructure with energy-efficient systems; improve pedestrian flow between buildings; make landscape and hardscape improvements; and better align parking lots and roadways.

5.1.3 Significant Impacts of the Project

The Project's significant environmental impacts vary across the three campuses according to their settings and the details of their proposed improvements. Alternatives should provide a means of reducing the level of one or more significant impacts that would otherwise result from implementation of the Project. **Tables 5-1** through **5-3** list the significant impacts that would result from the Project. These lists include significant impacts that can be reduced by mitigation measures to a less-than-significant level, as well as one significant and unavoidable impact related to exposure of offsite sensitive receptors to construction related DPM and fine PM2.5 at the College of San Mateo.

Table 5-1 lists all of the significant impacts prior to mitigation that are common to all three campuses.

Table 5-1. Significant Impacts Prior to Mitigation Common to all Three Campuses

Impacts
3.1 Aesthetics
Impact AES-1: Result in temporary visual impacts caused by construction activities
Impact AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area
3.2 Air Quality and Energy
Impact AQE-2: Violate a BAAQMD air quality standard or substantially contribute to an existing or projected air quality violation during Project construction
Impact AQE-4: Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment
Impact AQE-5: Expose existing sensitive receptors to substantial pollutant concentrations during construction
3.3 Biological Resources
Impact BIO-1: Impact special-status plant species
Impact BIO-2: Impact special-status bird species
Impact BIO-3: Impact special-status bats
Impact CC-BIO-5; CSM-BIO-4; SC-BIO-7: Impact native wildlife nursery sites
3.4 Cultural Resources
Impact CUL-2: Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5
Impact CUL-3: Disturb any human remains, including those interred outside of formal cemeteries
3.5 Geology, Soils, and Paleontology
Impact GEO-2: Expose people or structures to strong seismically induced groundshaking
Impact GEO-5: Result in loss of topsoil from Project construction and operation
Impact GEO-7: Increase risk of damage to Project structures as a result of Project location on expansive soils
3.6 Greenhouse Gases
Impact GHG-1: Generate GHG emissions during Project construction
3.7 Hazards and Hazardous Materials
Impact HAZ-1: Cause a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during Project construction or from Project operation
Impact HAZ-2: Cause 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 during Project construction
Impact HAZ-4: Emit or involve handling of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school
Impact HAZ-6: Interfere with adopted emergency response plan or emergency evacuation plan
Impact HAZ-7: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires

Impacts
3.8 Hydrology and Water Quality
Impact HYD-1: Violate any water quality standards or waste discharge requirements and/or otherwise substantially degrade water quality
Impact HYD-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level
Impact HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite
Impact HYD-4: Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff
Impact HYD-5: Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place within a 100-year flood hazard area structures that would impede or redirect flood flows
3.10 Noise
Impact NOI-1: Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies
Impact NOI-4: Result in a temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project
3.14 Transportation and Traffic
Impact TRA-4: Result in potential construction impacts on traffic operation and circulation, transit service, nonmotorized transportation facilities, and emergency access

Table 5-2 lists all of the significant impacts prior to mitigation that are specific to Cañada College.

Table 5-2. Significant Impacts Prior to Mitigation Specific to Cañada College

Impacts
3.1 Aesthetics
Impact CC-AES-2: Substantially degrade the existing visual character or quality of the site and its surroundings, including views from scenic vistas
Impact CC-AES-3: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway

There are no significant impacts prior to mitigation that are specific to the College of San Mateo.

Table 5-3 lists all of the significant impacts prior to mitigation that are specific to Skyline College.

Table 5-3. Significant Impacts Prior to Mitigation Specific to Skyline College

Impacts
3.1 Aesthetics
Impact SC-AES-2: Substantially degrade the existing visual character or quality of the site and its surroundings, including views from scenic vistas
Impact SC-AES-3: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
3.3 Biological Resources
Impact SC-BIO-4: Impact Mission blue butterfly
Impact SC-BIO-5: Impact California red-legged frog
Impact SC-BIO-8: Potentially conflict with the City of San Bruno's heritage tree ordinance
3.5 Geology, Soils, and Paleontology
Impact SC-GEO-8: Result in direct or indirect destruction of a unique paleontological resource or site or unique geologic feature
3.9 Land Use and Planning
Impact SC-LUP-2: Conflict with applicable land use plans, policies, or regulations
3.12 Public Services and Utilities
Impact SC-PSU-1: Reduce service ratios and response times for fire protection and police protection services during construction and operation
Impact SC-PSU-2: Increase student enrollment at schools or increase level of service required at other public facilities resulting in an adverse physical impact these facilities
Impact SC-PSU-3: Increase demand for water supply at the Project site during construction and operation
Impact SC-PSU-4: Increase generation of wastewater at the Project site
3.13 Recreation
Impact SC-REC-1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated

5.2 Cañada College Alternatives Considered

5.2.1 CC-Alternative 1: No Project

None of the activities associated with the Project would be undertaken. The existing Cañada College facilities would be unchanged. Over time, activities on the campus would likely have a somewhat smaller impact on energy use, stormwater quality, and water demand than under existing conditions due to continued implementation of the campus sustainability plan. Air quality impacts would also lessen to a small degree due to improvements in automobile gas mileage and efficiency.

5.2.2 CC-Alternative 2: Reduced Size Kinesiology/Wellness Building

Under CC-Alternative 2, the Project would proceed as proposed, including the proposed swimming pools, but with a smaller Building 1 (Kinesiology/Wellness) intended to minimize aesthetic changes. The new building would be the same height and dimensions as the existing Building 1, Gymnasium, and would be built on the same footprint. The existing Building 1, Gymnasium (39,000 square feet in area) is approximately 45% of the size of the proposed Kinesiology/Wellness Building (85,000 square feet in area). Consequently, under CC-Alternative 2, the expected student/faculty/staff/public memberships at the proposed health club would be fewer. For purposes of analysis, the number of memberships under CC-Alternative 2 is estimated at 2,750 rather than 6,000 for the Project. CC-Alternative 2 would not need the full expansion of Lot 6 that is proposed with the Project.

CC-Alternative 2 would result in the same level of environmental impacts as the Project, with the following exceptions. This alternative would not increase any of the Project's environmental impacts.

- Aesthetics: The view of Building 1, Kinesiology/Wellness, from Interstate 280 (I-280) would not be substantially larger than that of the existing Building 1. This would avoid visual impacts from I-280.
- Air Quality and Energy: Fewer memberships at the health club would result in fewer automobile trips from outside the campus than under the Project. This would marginally reduce mobile emissions in comparison to the Project. Although the Project would not have a significant effect on energy, CC-Alternative 2 would require less energy to operate than the Project.
- Greenhouse Gas (GHG) Emissions: Because there would be fewer automobile trips from outside campus, GHG emissions from mobile sources would be marginally less than the Project.
- Hydrology/Water Quality: CC-Alternative 2 would enable the District to reduce or eliminate the proposed expansion of Parking Lot 6. This would result in little or no increase in stormwater runoff, in comparison with existing conditions. The effects of stormwater runoff are already less than significant under the proposed Project due to the environmental commitments and mitigation measures identified in Chapter 3.8, *Hydrology and Water Quality*; CC-Alternative 2 would further reduce the impact.
- Public Services and Utilities: The Kinesiology/Wellness Building under CC-Alternative 2 would have substantially fewer members than the Project. It would therefore have a smaller demand on public services and utilities. The impact of the Project was not significant; the impact of CC-Alternative 2 would be even less.
- Transportation and Traffic: CC-Alternative 2 would generate fewer automobile trips than the Project due to the reduced number of health club members. Although the Project with mitigation would not result in significant effects on transportation and traffic, CC-Alternative 2 would further reduce traffic impacts in comparison to the Project.

5.3 College of San Mateo Alternatives Considered

Other than the No Project Alternative, there are no potential alternatives to improvements at CSM that would meet the Project's objectives, and reduce the significant and unavoidable impact related to exposure of offsite sensitive receptors to DPM and PM2.5 during construction to less than significant. An analysis was completed in which Buildings 12 and 19 were not demolished and a new Building 19 was not constructed. Under this scenario, DPM and PM2.5 emissions from construction still exceeded the BAAQMD's thresholds for offsite sensitive receptors, and impacts were still significant and unavoidable. Specifically, a key objective of the Project is "to provide modern facilities and technology for the foreseeable future." That is not possible without replacing old buildings with new. Therefore, an alternative, CSM-Alternative 2, was developed that would help to further offset GHG emissions from campus operations.

5.3.1 CSM-Alternative 1: No Project

None of the activities associated with the Project would be undertaken. The existing College of San Mateo facilities would be unchanged. Over time, activities on the campus would likely have a somewhat smaller impact on energy use, stormwater quality, and water demand than under existing conditions due to continued implementation of the campus sustainability plan. The significant and unavoidable impact related to offsite sensitive receptors during construction would be avoided, and other air quality impacts would lessen to a small degree due to improvements in automobile gas mileage and efficiency.

5.3.2 CSM-Alternative 2: Additional Solar Energy

Under CSM-Alternative 2, the District would install additional solar energy recovery systems on campus in those parking lots that are not slated for solar energy recovery systems in the Project. The additional renewable energy capacity would help to offset the GHG emissions from campus operations.

Most parking lots are located away from the campus periphery and are screened from view by ornamental trees. Solar panels installed in these parking lots would not be visible from surrounding properties and therefore would not adversely affect neighbors' views.

Given the sizes of the parking lots, and estimated gain at the District's other proposed solar installations, approximately 0.3 megawatts of power could be generated at the campus. This estimate is based on 3 kilowatts per square foot and solar panel coverage of approximately 100,000 square feet.

CSM-Alternative 2 would result in the same level of environmental impacts as the Project, with the following exceptions.

- Air Quality and Energy: Installation of the solar panels would require additional truck trips in comparison to the Project. This would increase mobile emissions. However, with **Mitigation Measure CSM-ALT-2**, described below, those emissions would not occur concurrently with other construction and are unlikely to exceed BAAQMD significance thresholds. The solar panels would reduce net energy demand at the CSM campus. Construction activities would still expose offsite sensitive receptors to DPM and PM2.5, resulting in a significant and unavoidable impact.
- Greenhouse Gas Emissions: CSM-Alternative 2 would reduce the operational GHG emissions from the Project by producing solar energy to offset non-renewable energy sources.

- Transportation and Traffic: CSM-Alternative 2 would require a greater number of truck trips during construction than the Project. This impact would be reduced to a less-than-significant level with implementation of **Mitigation Measure CSM-ALT-2**.
    - **Mitigation Measure CSM-ALT-2**: Implement Construction and Delivery in Phases. Installation of the solar panels will be phased such that no construction, delivery of materials, or installation associated with the solar energy facilities on the parking lots will occur during the period of construction of the other planned campus improvements.

5.4 Skyline College Alternatives Considered

5.4.1 SC-Alternative 1: No Project

None of the activities associated with the Project would be undertaken. The existing Skyline College facilities would be unchanged and there would be no residential complex. Over time, activities on the campus would likely have a somewhat smaller impact on energy use, stormwater quality, and water demand than under existing conditions due to continued implementation of the campus sustainability plan. Air quality impacts would also lessen to a small degree due to improvements in automobile gas mileage and efficiency.

5.4.2 SC-Alternative 2: Reduced Density Residential Complex

The Project's proposed 71-dwelling unit residential complex would exceed the residential density currently provided for in the City of San Bruno General Plan for Surplus Parcel B. Under SC-Alternative 2, the Project would proceed as proposed, with the exception of the residential complex. SC-Alternative 2 would propose 62 dwelling units on Surplus Parcel B, including 40 single-family homes and 22 multi-family units. This would conform to San Bruno's current general plan density and intensity standards without the need for a general plan amendment. The District would propose to rezone the site from Open Space to Planned Development (P-D). The rezoning would bring the site's zoning into conformity with the general plan, as required by Government Code Section 65860.

SC-Alternative 2 would result in the same level of environmental impacts as the Project, with the exceptions listed below where impacts would be less. This alternative would not increase any of the Project's environmental impacts.

- Air Quality and Energy: Because there would be fewer residences, there would be fewer automobile trips. This would marginally reduce mobile emissions. The Project would not have a significant effect on energy. SC-Alternative 2, by virtue of reducing the number of dwelling units, would require less energy than the Project.
- Greenhouse Gas Emissions: Because there would be fewer automobile trips from the residential complex, GHG emissions from mobile sources would be marginally less than with the Project.
- Land Use and Planning: SC-Alternative 2 would not require an amendment of the San Bruno General Plan and would rezone Surplus Parcel B in conformity with the general plan. This would avoid the impact on the general plan's policies and Mitigation Measure SC-LUP-1 would not be required.
- Noise: SC-Alternative 2 would result in fewer residences located next to existing homes in San Bruno. This could result in a small reduction in the noise generated by typical household

activities. The impact of the Project was not significant; the impact of SC-Alternative 2 would be even less.

- Public Services and Utilities: SC-Alternative 2 would have fewer residences than the Project. It would therefore have a smaller demand on public services and utilities. The impact of the Project was not significant; the impact of SC-Alternative 2 would be even less.
- Transportation and Traffic: SC-Alternative 2 would generate fewer automobile trips than the Project due to the smaller number of dwelling units. Although the Project, with mitigation, would not result in significant effects on traffic, SC-Alternative 2 would further reduce traffic impacts.

5.5 Environmentally Superior Alternative

CEQA requires an EIR to examine a range of feasible alternatives to the project. State CEQA Guidelines Section 15126.6(e)(2) requires that the EIR identify which of those alternatives is the environmentally superior alternative. If the No Project Alternative is the environmentally superior alternative, then CEQA requires an EIR to identify which of the other alternatives is environmentally superior.

The No Project Alternative would have fewer impacts than the three college-specific alternatives. Because the alternatives are college-specific, there is no single environmentally superior alternative, but rather there are three environmentally superior alternatives: CC-Alternative 2, CSM-Alternative 2, and SC-Alternative 2.

Table 5-4 provides an overview of the potential differences in the level of impacts under the alternatives considered in this EIR.

Table 5-4. Comparison of Alternative Impacts to the Project

	Alternative 1 (No Project)	CC-Alternative 2	CSM-Alternative 2	SC-Alternative 2
Aesthetics	Less	Less	Same	Same
Air Quality and Energy	Less	Less	Less	Less
Biological Resources	Less	Same	Same	Same
Cultural Resources	Less	Same	Same	Same
Geology, Soils, and Paleontology	Less	Same	Same	Same
Greenhouse Gas Emissions	Less	Less	Less	Less
Hazards and Hazardous Materials	Less	Same	Same	Same
Hydrology and Water Quality	Less	Less	Same	Same
Land Use and Planning	Less	Same	Same	Less
Noise	Less	Same	Same	Less
Population and Housing	Less	Same	Same	Less
Public Services and Utilities	Less	Less	Same	Less
Transportation and Traffic	Less	Less	Same[a]	Less
Cumulative Impacts	Less	Less	Less	Less

Note:
[a] With Mitigation Measure CSM-ALT-2.

Chapter 6
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Chapter 7
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Bosch, Dennis, Services Manager, City of San Bruno Public Services Department. Email to Jessie Shen, ICF International, regarding San Bruno's wastewater capacity and wastewater facility/infrastructure.

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Tan, Jimmy, Deputy Public Services Director/City Engineer, City of San Bruno Public Services Department. Email to Jessie Shen, ICF International, regarding San Bruno's water supply and waste facility/infrastructure.

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APPENDICES TO

DRAFT ENVIRONMENTAL IMPACT REPORT

SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT

2015 FACILITIES MASTER PLAN AMENDMENT

STATE CLEARINGHOUSE #2015052007

August 2015

ICF INTERNATIONAL

Appendix A

NOP and Scoping Comments

Appendix A-1: Notice of Preparation

Appendix A-2: Scoping Comments

A-1
Notice of Preparation

POSTING ONLY
ANSHU NAND
MAY 05 2015

SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT

Office of the Chancellor
3401 CSM Drive, San Mateo, CA 94402
P: (650) 574-6550 F: (650) 574-6566
www.smccd.edu

May 4, 2015

To: State Agencies
Responsible Agencies
Local and Public Agencies
Trustee Agencies
Interested Parties

From: Barbara Christensen
San Mateo County Community College District
Director of Community/ Government Relations
3401 CSM Drive
San Mateo, CA 94402

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT FOR THE SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT 2015 FACILITIES MASTER PLAN AMENDMENT

As the Lead Agency, San Mateo County Community College District (District) will prepare an Environmental Impact Report (EIR) for the above referenced project and would like your views regarding the scope and content of the environmental information to be addressed in the EIR. This EIR may be used by your agency when considering approvals for this Project. The Project description, location, and a brief summary of potential environmental effects are attached.

According to State law, the deadline for your response is 30 days after receipt of this notice; however, we would appreciate an earlier response, if possible. Written comments will be accepted until **June 8, 2015** at **5:00 pm**. Please identify a contact person, and send your comments to:

San Mateo County Community College District
Attention: Barbara Christensen
3401 CSM Drive
San Mateo, CA 94402
(650) 574-6560
christensen@smccd.edu

Barbara Christensen
Director of Community/Government Relations

Barbara Christensen

Date: May 4, 2015

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT FOR THE SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT 2015 FACILITIES MASTER PLAN AMENDMENT

A. INTRODUCTION

The purpose of an Environmental Impact Report (EIR) is to inform decision makers and the general public of the environmental effects of a proposed project. The EIR process is intended to provide environmental information sufficient to evaluate a proposed project and its potential for significant impacts on the environment; to examine methods of reducing adverse environmental impacts; and to consider alternatives to the project. Although an EIR is one of the first documents to be reviewed when considering a project, the document itself, including its certification, does not constitute project approval. Upon finding the EIR is complete and in compliance with the California Environmental Quality Act (CEQA) of 1970, as amended, the District Board of Trustees will consider certification of the EIR at a public hearing.

The EIR for the Project will be prepared and processed in accordance with CEQA and will include:

- A summary of the Project
- A Project description
- An environmental setting, impact analysis and mitigation measures
- Alternatives to the Project as proposed
- Other CEQA considerations including: (a) any significant environmental effects which cannot be avoided if the Project is implemented, (b) the growth-inducing impacts of the proposed Project, and (c) cumulative impacts.

B. PROJECT LOCATION

The San Mateo County Community College District (District) has three campuses in San Mateo County, California, including Cañada College in Redwood City and the Town of Woodside, College of San Mateo (CSM) in the City of San Mateo, and Skyline College in the City of San Bruno. Figure 1 shows the regional locations of each of the three campuses.

Cañada College

Cañada College is 124 acres located within Redwood City and the Town of Woodside. Regional access is from Interstate 280 (I-280) on the west side of the campus, as well as from State Route (SR) 84, approximately 1.5 miles to the southwest on the east side of campus. The main entrance is on Farm Hill Boulevard. There is a second entrance on West Entry Drive off of Cañada Road. The campus is surrounded by residential development on all sides; Emerald Hills Golf Course to the northeast; and Barkley Fields and Park on Farm Hill Boulevard to the south.

College of San Mateo

CSM is 150 acres located in the City of San Mateo. Regional access is from SR 92 on the northeast side of the campus. The main entrance is on West Hillsdale Boulevard on the southeast side of campus. There is a second entrance on CSM Drive, on the southwest side of campus. The campus is surrounded by residential development to the north, west, and east and by an office complex to the south.

Skyline College

Skyline College is 108 acres located in the City of San Bruno. Regional access is from I-280 on the east side of campus. The main entrance is from College Drive off of Skyline Boulevard on the east side of the campus.

There is a second entrance from College Drive off of Sharp Park Boulevard on the northwest side of the campus. The campus is surrounded by residential development to the north and east, undeveloped land to the west and south, and a County jail to the south.

C. DESCRIPTION OF THE PROJECT

The 2015 Facilities Master Plan Amendment would continue the modernization and renovation work that began with adoption of the District's 2001 and 2006 Facilities Master Plans. The 2015 Facilities Master Plan Amendment identifies planned improvements at the three campuses including, but not limited to: building modernization and renovation, building demolition, new building construction, tree removal, landscaping/pedestrian improvements, and changes in parking and roadways. The locations of each of the proposed improvements are shown in Figures 2 through 4. The specific design and construction of campus projects would occur as projects are funded through the District's Capital Improvement Program.

The Project proposes the following development at each campus:

Cañada College

- New construction:
    - Building 1, Kinesiology/Wellness, including demolition of existing Building 1 (approximately 39,500 sf) and construction of a new Building 1 (approximately 85,000 sf) and two new swimming pools (25 meters each)
    - Math/Science/Engineering Building (approximately 55,000 sf)
- Modernization and renovation:
    - Building 3, Performing Arts Center
    - Building 9, Library/Student Resource Center
    - Building 13, Multi-Disciplinary Instructional Center
    - Building 16, Instructional
    - Building 18, Instructional
- Pedestrian improvements:
    - North quad between existing Buildings 17 and 22
- Parking lot expansion:
    - Lot 6, an additional approximately 325 parking stalls
    - Lot 10, an additional approximately 150 to 200 parking stalls, including demolition of temporary Buildings 19, 20, and 21
- Potential renewable energy installations (e.g., photovoltaic, solar thermal, or cogeneration):
    - Building 1, Kinesiology/Wellness
    - Math/Science/Engineering Building

College of San Mateo

- New construction:
    - Building 8, Kinesiology/Wellness, including demolition of existing Building 8 (approximately 56,000 sf) and construction of a new Building 8 (approximately 75,000 to 80,000 sf)
- Modernization and renovation:
    - Building 1, Public Safety
    - Building 3, Arts & Humanities

    - Building 7, Facilities Maintenance Center
    - Building 9, Library/Information Technology Services
    - Building 17, Student Services
    - Building 34, Fire Science/Facilities Management
    - Corporation Yard
- Potential renewable energy installations (e.g., photovoltaic, solar thermal, or cogeneration):
    - Parking Lots 1, 2, and 9 (solar)
    - Building 7, Facilities Maintenance Center (cogeneration)

Skyline Campus

- New construction:
    - Environmental Sciences Building (approximately 18,000 to 20,000 sf), located west of parking lots F and G
    - Building 1, Social Science/Creative Arts Programs, including demolition of existing Building 1 (approximately 78,000 sf) and construction of new Building 1 (approximately 120,000 sf)
    - Boiler Plant adjacent to Building 2 (approximately 3,000 to 5,000 sf)
    - Energy Management Programs building (approximately 8,500 to 10,000 sf), located south of the Overflow Parking near Lot L
    - Residential Complex, up to 71 housing units, including up to 47 single-family detached homes for members of the public and up to 24 multi-family residential units for College faculty and staff, on Surplus Parcel B (approximate 8-acre parcel, located south of College Drive)
- Modernization and renovation:
    - Building 2, Workforce/Economic Development Prosperity Center
    - Building 5, Library
    - Building 14, Early Childhood Education
- Pedestrian improvements:
    - South pedestrian gateway between Building 1 and Lot C
    - Pedestrian connection between new Environmental Sciences Building and Building 8
- Parking lot expansion:
    - Demolition of existing Building 19 (approximately 39,000 sf) and expansion of Lot L, with approximately 125 to 175 additional parking stalls
- Potential renewable energy installations (e.g., photovoltaic, solar thermal, or cogeneration):
    - Building 1/1A
    - Energy Management Programs Facility

The proposed improvements would not facilitate increases in enrollment, employment, or contribute to campus growth. Enrollment at the three campuses has stabilized and is not currently limited as a function of campus size. The overarching purpose of the proposed improvements, including increasing building square footage, is to better serve approximately the same numbers of current students and staff with modern facilities and technology for the foreseeable future. Therefore, increasing the building square footage to improve functionality is not expected to result in significantly increased enrollment or campus employment.

However, there are two components of the Project that would increase use of specific campus facilities. Building 1, Kinesiology/Wellness Building, at the Cañada campus would be open to public memberships, in addition to use by students, staff and faculty. The residential complex at Skyline College would house the general public in single-family homes and staff and faculty in the multi-family housing.

D. ENVIRONMENTAL EFFECTS OF THE PROJECT

The Project could result in potential environmental effects associated with the following resource topics or environmental issues: aesthetics, air quality and energy, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services and utilities, and transportation/traffic, cumulative impacts, alternatives to the project, and growth inducing impacts. The analysis and potential effects are described further below. The Project would not result in environmental effects associated with agriculture and forest resources or mineral resources because these are not present on the Project site or area.

Aesthetics

The EIR will describe the existing visual character of the Project site and surrounding area including the existing viewpoints, notable visual resources, and the visual quality of the Project area and any impacts to scenic views that would result from development of the Project. This resource section will also consider the potential impacts of the creation of new sources of light and glare. Visual simulations from critical public viewpoints will be prepared to demonstrate changes in views as a result of the Project. The impact analysis will focus on changes in key public views, including alteration of visual character, impacts to scenic highways, and any proposed nighttime light and daytime glare, and will include recommendations and mitigation measures to lessen potential Project impacts, as appropriate.

Air Quality and Energy

Air Quality

The EIR will describe existing air quality conditions, potential impacts from Project construction and operation, and mitigation measures, including those recommended and required by the Bay Area Air Quality Management District (BAAQMD) designed to reduce the significance of identified Project-related air quality impacts. A screening-level health risk assessment will be prepared to estimate potential health risks associated with the Project. It is anticipated that construction activities could result in emissions of toxic air contaminants from diesel fuel combustion in construction equipment and heavy-duty trucks. Mitigation and/or avoidance measures will be identified for significant air quality impacts, as appropriate.

Energy Conservation

If feasible, the EIR will provide a quantitative analysis of transportation energy impacts, construction and operational energy impacts, and renewable energy impacts. The EIR will include a qualitative energy analysis for the Project based on Appendix F of the CEQA Guidelines. The energy analysis will include a discussion of relevant regulations and will describe existing energy resources and consumption levels within California and San Mateo County and by the District. Consistent with CEQA Guidelines Appendix F, the proposed Project will be evaluated for its potential to lead to a wasteful, inefficient, and unnecessary usage of direct or indirect energy.

Biological Resources

The EIR will provide a description of the existing biological resources on each of the three campuses, a discussion of potential impacts including tree removal, and appropriate mitigation and/or avoidance measures will be included in the EIR.

Cultural Resources

The EIR will evaluate potential impacts to historical resources, archaeological resources, and human remains. Potential impacts include the inadvertent discovery of unknown buried resources and altering the character of historic resources. The EIR will identify mitigation and/or avoidance measures for significant impacts to cultural resources, as appropriate.

Geology and Soils

The EIR will describe geologic and soil constraints and potential geologic and seismic hazards that could result in Project impacts, which could also include loss of top soil and erosion from grading. The EIR will identify mitigation and/or avoidance measures for significant geology and soils impacts, as appropriate.

Greenhouse Gas Emissions

The EIR will describe the existing greenhouse gas (GHG) emissions at each of the campuses, the Project's impacts to climate change and climate change's impacts to the Project, and mitigation measures designed to reduce the significance of Project-related climate change impacts.

Hazards and Hazardous Materials

There may be hazardous materials issues associated with building demolition (e.g., asbestos) and with serpentine soils at all three campuses. The EIR will discuss site hazards on the basis of available mapping of hazards and information in the Department of Toxic Substances Control database. In analyzing the Project's potential impacts, the EIR will take into account standard code requirements and best management practices for the handling of hazardous materials. Mitigation measures will be identified to reduce significant hazardous materials impacts, as appropriate.

Hydrology and Water Quality

The EIR will describe potential effects on hydrology and water quality, including stormwater drainage and the potential for flooding on the site, and will identify appropriate mitigation and/or avoidance measures for these impacts. In addition, the EIR will describe impacts from stormwater runoff and drainage from the proposed development. The impact analysis will identify any additional mitigation to avoid significant impacts, if necessary.

Land Use and Planning

The EIR will describe the existing land uses on and adjacent to the Project site, and the Project's compatibility with existing and planned land uses on and adjacent to the campuses. It is important to note that the College District Board of Trustees has exempted the 2015 Facilities Master Plan Amendment project from the application of city and county zoning ordinances. At Skyline College, the proposed future housing will be examined on the basis of its consistency with the City of San Bruno General Plan in coordination with the City. Housing is not exempt from zoning because it is not a classroom use. Land use impacts resulting from the proposed uses on the site will be addressed. Mitigation and/or avoidance measures will be identified for significant land use impacts, as appropriate.

Noise

The EIR will evaluate noise and vibration impacts associated with construction and operation of the Project. Existing noise conditions at each of the three campuses will be described. The EIR will also address the compatibility of the proposed uses with the Project site's existing and future noise exposure, offsite impacts resulting from onsite noise sources, Project-generated traffic noise impacts to sensitive receptors in the area, and the temporary noise increase during Project construction. Mitigation and/or avoidance measures will be identified for significant noise impacts, as appropriate.

Population and Housing

The EIR will examine the Project's potential to effect population and housing. This section will discuss qualitatively the housing supply and demand in the context of Association of Bay Area Governments (ABAG) regional household forecasts and fair share housing allocations. Mitigation measures will be identified that would avoid or reduce significant impacts to population and housing.

Public Services and Utilities

The EIR will identify existing public services, systems utilities, and service providers. The analysis will examine whether existing public services and utilities are sufficient to serve the Project and the impacts, if any, of expanding public services if that is necessary. Existing public services and utilities and providers in the Project area will be identified to determine the needs of the new facilities. The analysis will also evaluate the Project's effects on public services and utility disruption, if any, and mitigation measures will be identified that would avoid or reduce significant impacts to public services and utilities, if necessary.

Recreation

The EIR will examine the extent to which the Project may affect nearby recreation areas or create the need for new recreation areas. Existing recreational facilities in the campus areas will be identified to determine whether any such facilities would be disrupted during Project construction. An assessment will be performed to determine whether Project implementation would result in substantial increase in demand for recreational facilities such that new or improved facilities would be required. The Project includes a public Health Club and Aquatic Center at the new Kinesiology/Wellness Building on the Cañada College campus that would be available to the public; this is an addition to recreation uses in the area. Mitigation measures will be identified that would avoid or reduce significant impacts to recreation, if necessary.

Transportation/Traffic

The EIR will describe the existing transportation network and evaluate the Project's traffic impacts. The EIR will analyze construction-related traffic impacts at each campus. An operations or trip generation analysis will be conducted for the public Health Club and Aquatic Center located at the Kinesiology/Wellness Building at Cañada College and the new residential development proposed at Skyline College. Mitigation and/or avoidance measures will be identified for any significant traffic impacts.

Cumulative Impacts

In accordance with CEQA, the EIR will address the impacts of implementing this Project in combination with other past, present, and reasonably foreseeable future projects in San Mateo County and neighboring jurisdictions. The EIR will identify the Project's contribution to cumulative impacts and, if necessary, mitigation to reduce the contribution to a less than significant level.

Alternatives to the Project

In accordance with CEQA, the EIR will qualitatively evaluate a reasonable range of potentially feasible alternatives to the Project and a "No Project" alternative. Alternatives will be identified based on their ability to meet most of the Project objectives but reduce or avoid significant environmental impacts, and will likely include a reduced intensity alternative.

Other CEQA Sections

The EIR will include other sections required by CEQA, including Significant Unavoidable Impacts, Significant Irreversible Environmental Changes, Growth-inducing Impacts, Authors and Consultants, References, and Technical Appendices.

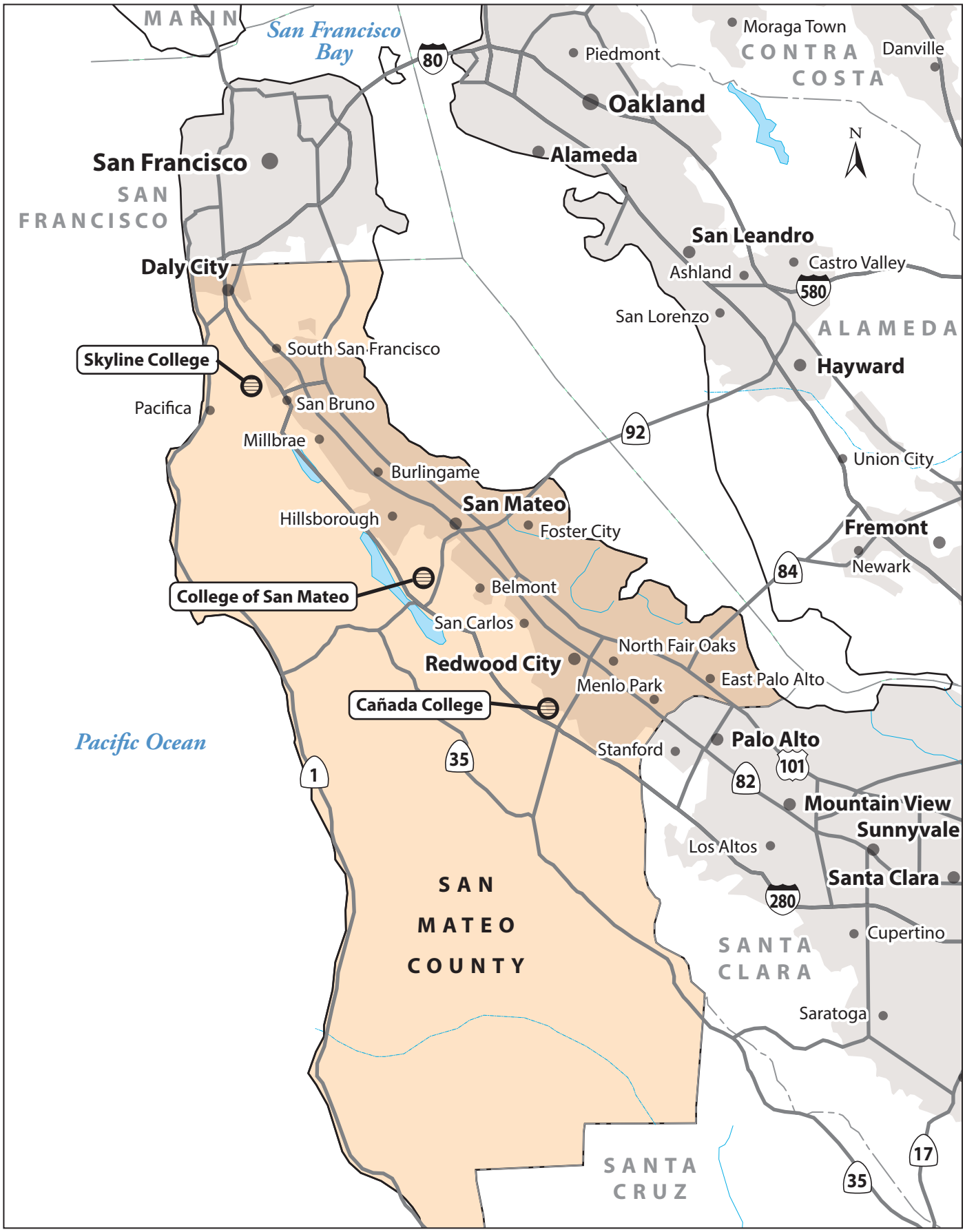
E. SCOPING COMMENTS

The District is soliciting input regarding the scope and content of the EIR and environmental information appropriate to your agency's statutory responsibilities or of interest to your organization. Specifically, we are requesting the following.

1. Identify significant environmental effects and mitigation measures that you believe need to be explored in the EIR with supporting discussion of why you believe these effects may be significant.
2. Describe special studies and other information that you believe are necessary for the District to analyze the significant environmental effects, alternatives, and mitigation measures you have identified.
3. For public agencies that provide infrastructure and public services, identify any facilities that will be required to provide services.
4. Indicate whether staff from your agency would like to meet with District staff to discuss the scope and content of the EIR's environmental information.
5. Provide the name, title, telephone number, postal, and email addresses of the contact person from your agency or organization that we can contact regarding your comments.
6. Identify alternatives that you believe need to be explored in further detail in the EIR.

Comments may be sent to:

Barbara Christensen
San Mateo County Community College District
Director of Community/Government Relations
3401 CSM Drive
San Mateo, CA 94402
christensen@smccd.edu



Graphics ... 00234.15 (4-28-2015)

ICF INTERNATIONAL

Figure 1
Regional Location of Cañada College, College of San Mateo, and Skyline College Campuses



Graphics / 00234.15 / SMCCCD Facilities Update EIR (4-28-2015)

Figure 2
Proposed Improvements at Cañada College



Graphics / 00234.15 / SMCCCD Facilities Update EIR (4-28-2015)

Figure 3
Proposed Improvements at College of San Mateo



Graphics / 00234.15 / SMCCCD Facilities Update EIR (4-28-2015)

Figure 4
Proposed Improvements at Skyline College

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

2015052007

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: San Mateo County Community College District 2015 Facilities Master Plan Amendment

Lead Agency: San Mateo County Community College District
Contact Person: Barbara Christensen
Mailing Address: 3401 CSM Drive
Phone: (650) 574-6560
City: San Mateo Zip: 94402
County: San Mateo

Project Location: County: San Mateo City/Nearest Community: Redwood City, Woodside; San Mateo; San Bruno
Cross Streets: Farm Hill Boulevard; West Hillsdale Boulevard; Skyline Boulevard Zip Code: 94061;94402;94066
Longitude/Latitude (degrees, minutes and seconds): ____° ____′ ____″ N / ____° ____′ ____″ W Total Acres: 124;150;108
Assessor's Parcel No.: Section: Twp.: Range: Base:
Within 2 Miles: State Hwy #: I-280, SR 84, SR 92 Waterways: Emerald Lake; Crystal Springs Reservoir; Pacific Ocean
Airports: Railways: Schools: See attached

Document Type:

CEQA: ☒ NOP ☐ Draft EIR NEPA: ☐ NOI Other: ☐ Joint Document
☐ Early Cons ☐ Supplement/Subsequent EIR ☐ EA ☐ Final Document
☐ Neg Dec (Prior SCH No.) ☐ Draft EIS ☐ Other:
☐ Mit Neg Dec Other: ☐ FONSI

Local Action Type:

☐ General Plan Update ☐ Specific Plan ☐ Rezone ☐ Annexation
☐ General Plan Amendment ☐ Master Plan ☐ Prezone ☒ Redevelopment
☐ General Plan Element ☐ Planned Unit Development ☐ Use Permit ☐ Coastal Permit
☐ Community Plan ☐ Site Plan ☐ Land Division (Subdivision, etc.) ☐ Other:

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MAY 05 2015
STATE CLEARING HOUSE

Development Type:

☒ Residential: Units 71 Acres +/- 8
☐ Office: Sq.ft. Acres Employees
☐ Commercial: Sq.ft. Acres Employees
☐ Industrial: Sq.ft. Acres Employees
☒ Educational: College facility improvements
☒ Recreational: 25 meter swimming pools (2) and health club
☒ Water Facilities: Type swimming pools MGD

☐ Transportation: Type
☐ Mining: Mineral
☒ Power: Type Solar MW
☐ Waste Treatment: Type MGD
☐ Hazardous Waste: Type
☒ Other: Parking lot expansion and roadway reconfiguration

Project Issues Discussed in Document:

☒ Aesthetic/Visual ☐ Fiscal ☒ Recreation/Parks ☒ Vegetation
☐ Agricultural Land ☒ Flood Plain/Flooding ☒ Schools/Universities ☒ Water Quality
☒ Air Quality ☐ Forest Land/Fire Hazard ☐ Septic Systems ☒ Water Supply/Groundwater
☒ Archeological/Historical ☒ Geologic/Seismic ☒ Sewer Capacity ☐ Wetland/Riparian
☒ Biological Resources ☐ Minerals ☒ Soil Erosion/Compaction/Grading ☒ Growth Inducement
☐ Coastal Zone ☒ Noise ☒ Solid Waste ☒ Land Use
☒ Drainage/Absorption ☒ Population/Housing Balance ☒ Toxic/Hazardous ☒ Cumulative Effects
☐ Economic/Jobs ☒ Public Services/Facilities ☒ Traffic/Circulation ☒ Other: GHG Emissions

Present Land Use/Zoning/General Plan Designation:

Existing college campuses

Project Description: *(please use a separate page if necessary)*

San Mateo Community College District (District) has three campuses in San Mateo County, California including Cañada College in Redwood City and the Town of Woodside, College of San Mateo (CSM) in the City of San Mateo, and Skyline College in the City of San Bruno. The 2015 Facilities Master Plan Amendment would continue the modernization and renovation work that began with adoption of the District's 2001 and 2006 Facilities Master Plans. The 2015 Facilities Master Plan Amendment identifies planned improvements at the three campuses including, but not limited to: building modernization and renovation, building demolition, new building construction, tree removal, landscaping/pedestrian improvements, roadway construction/ reconstruction, and changes in parking and roadway reconfiguration.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
If you have already sent your document to the agency please denote that with an "S".

____	Air Resources Board	X	Office of Historic Preservation
____	Boating & Waterways, Department of	____	Office of Public School Construction
____	California Emergency Management Agency	____	Parks & Recreation, Department of
____	California Highway Patrol	____	Pesticide Regulation, Department of
X	Caltrans District #4	____	Public Utilities Commission
____	Caltrans Division of Aeronautics	X	Regional WQCB #2
____	Caltrans Planning	____	Resources Agency
____	Central Valley Flood Protection Board	____	Resources Recycling and Recovery, Department of
____	Coachella Valley Mtns. Conservancy	____	S.F. Bay Conservation & Development Comm.
____	Coastal Commission	____	San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
____	Colorado River Board	____	San Joaquin River Conservancy
____	Conservation, Department of	____	Santa Monica Mtns. Conservancy
____	Corrections, Department of	____	State Lands Commission
____	Delta Protection Commission	____	SWRCB: Clean Water Grants
____	Education, Department of	____	SWRCB: Water Quality
____	Energy Commission	____	SWRCB: Water Rights
____	Fish & Game Region # ____	____	Tahoe Regional Planning Agency
____	Food & Agriculture, Department of	____	Toxic Substances Control, Department of
____	Forestry and Fire Protection, Department of	____	Water Resources, Department of
____	General Services, Department of		
____	Health Services, Department of	____	Other: ____
____	Housing & Community Development	____	Other: ____
X	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date May 5, 2015 Ending Date June 8, 2015

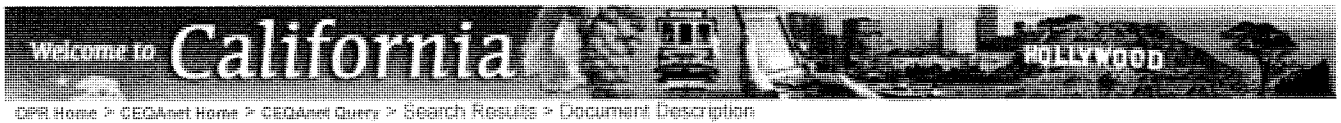
Lead Agency (Complete if applicable):

Consulting Firm: ICF International
Address: 620 Folsom Street-2nd Floor
City/State/Zip: San Francisco, CA 94107
Contact: Elizabeth Antin
Phone: (415) 677-7102

Applicant: San Mateo County Community College District
Address: 3401 CSM Drive
City/State/Zip: San Mateo, CA 94402
Phone: (650) 574-6560

Signature of Lead Agency Representative: _____ **Date:** 5/4/15

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.



San Mateo County Community College District 2015 Facilities Master Plan Amendment

SCH Number: 2015052007

Document Type: NOP - Notice of Preparation

Project Lead Agency: San Mateo County Community College District

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Project Description

San Mateo Community College District has three campuses in San Mateo County, California including Canada College in Redwood City and the Town of Woodside, College of San Mateo (CSM) in the City of San Mateo, and Skyline College in the City of San Bruno. The 2015 Facilities Master Plan Amendment would continue the modernization and renovation work that began with adoption of the District's 2001 and 2006 Facilities Master Plans. The2015 Facilities Master Plan Amendment identifies planned improvements at the three campuses including, but not limited to: building modernization and renovation, building demolition, new building construction, tree removal, landscaping/pedestrian improvements, roadway construction/reconstruction, and changes in parking and roadway reconfiguration.

Contact Information

Primary Contact:
Barbara Christensen
San Mateo County Community College District
650-574-6560
3401 CSM Drive
San Mateo, CA 94402

Project Location

County: San Mateo
City: Redwood City, Woodside, San Mateo, San Bruno
Region:
Cross Streets: Farm Hill Boulevard; West Hillside Boulevard; Skyline Boulevard
Latitude/Longitude:
Parcel No:
Township:
Range:
Section:
Base:
Other Location Info:

Proximity To

Highways: I-280, SR 84, SR 92
Airports:
Railways:
Waterways: Emerald Lake; Crystal Springs Reservoir; Pacific Ocean
Schools: Various
Land Use: Existing College Campuses

Development Type

Residential, Educational (College facility improvements), Recreational (25 meter swimming pools (2) & health club), Water Facilities, Power: Other Power Type (Solar), Other (Parking lot expansion & roadway reconfiguration)

Local Action

Redevelopment

Project Issues

Aesthetic/Visual, Air Quality, Archaeologic-Historic, Biological Resources, Drainage/Absorption, Flood Plain/Flooding, Geologic/Seismic, Noise, Population/Housing Balance, Public Services, Recreation/Parks, Schools/Universities, Sewer Capacity, Soil Erosion/Compaction/Grading, Solid Waste, Toxic/Hazardous, Traffic/Circulation, Vegetation, Water Quality, Water Supply, Growth Inducing, Landuse, Cumulative Effects, Other Issues (GHG Emissions)

Reviewing Agencies (Agencies in **Bold Type** submitted comment letters to the State Clearinghouse)

Resources Agency; Office of Historic Preservation; Department of Parks and Recreation; Resources, Recycling and Recovery; Department of Water Resources; Department of Fish and Wildlife, Region 3; Native American Heritage Commission; California Highway Patrol; **Caltrans, District 4**; Air Resources Board; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 2

Date Received: 5/5/2015 **Start of Review:** 5/5/2015 **End of Review:** 6/3/2015

CEQAnet HOME | NEW SEARCH

A-2
Scoping Comments

DEPARTMENT OF TRANSPORTATION
DISTRICT 4
P.O. BOX 23660, MS-10D
OAKLAND, CA 94623-0660
PHONE (510) 286-5528
FAX (510) 286-5559
TTY 711
http://www.dot.ca.gov/dist4/

Serious Drought.
Help save water!

May 28, 2015

MSVar030
SCH# 2015052007

Ms. Barbara Christensen
San Mateo County Community College District
3401 CSM Drive
San Mateo, CA 94402

Dear Ms. Christensen:

San Mateo County Community College District 2015 Facilities Master Plan Amendment – Notice of Preparation

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above project. Caltrans' new mission, vision, and goals signal a modernization of our approach to California's transportation system; provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. The Local Development-Intergovernmental Review Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities of infill, conservation, and efficient development. We provide these comments consistent with the State's smart mobility goals that support a vibrant economy, and build communities, not sprawl. The following comments are based on the Notice of Preparation.

Project Understanding
The project identifies planned improvements at the San Mateo County Community College District's (District) three campuses. These improvements include but not limited to: building modernization and renovation, building demolition, new building construction, tree removal, landscaping/pedestrian improvements, and changes in the parking and roadways. The specific design and construction of campus projects would occur as projects are funded through the District's Capital Improvement Program.

Traffic Impact Fees
Please identify any Transportation Impact Fees associated with this proposed project. The scheduling and costs associated with planned improvements on the Caltrans right-of-way should be listed, in addition to identifying viable funding sources per General Plan Guidelines.

Traffic Impact Study and Multi-Modal Transportation
Please provide the following:

1. Mitigation for any roadway sections or intersections with increasing Vehicles Miles Travelled (VMT) need to be identified. Mitigation may include contribution to a regional fee program as applicable, and should support the use of transit and active transportation modes.

2. Impacts on pedestrians and bicyclists resulting from projected VMT increases need to be analyzed. The analysis should describe any pedestrian and bicycle mitigation measures and safety countermeasures needed to maintain and improve access to transit facilities and reduce vehicle trips.

3. Please consider pedestrian, bicycling, and transit performance or quality of service measures and modeling as a means of estimating the project impacts to these modes and evaluating mitigation measures and tradeoffs.

4. Include a Transportation Demand Management (TDM) Plan that will provide for appropriate documentation for monitoring TDM measures, including annual reports to demonstrate the ongoing reduction of vehicle trips while continuing to survey the travel pattern of employees and visitors.

Vehicle Trip Reduction
We encourage you to develop Travel Demand Management (TDM) policies to encourage usage of nearby public transit lines and reduce vehicle trips on the State Highway System. These policies could include lower parking ratios, car-sharing programs, preferential car/van pool parking, electric vehicle charging stations, bicycle parking and showers, shuttle services to transit, subsidized transit passes, and providing transit passes to students and employees.

For information about parking ratios, see the Metropolitan Transportation Commission (MTC) report *Reforming Parking Policies to Support Smart Growth* or visit the MTC parking webpage: http://www.mtc.ca.gov/planning/smart_growth/parking/.

In addition, secondary impacts on pedestrians and bicyclists resulting from any traffic impact mitigation measures should be analyzed. The analysis should describe any pedestrian and bicycle mitigation measures and safety countermeasures that would in turn be needed as a means of maintaining and improving access to transit facilities and reducing vehicle trips and traffic impacts on state highways.

Please provide at least one hard copy and one CD of the environmental document including technical appendices as soon as they are available.

Please feel free to call or email Sandra Finegan at (510) 622-1644 or sandra.finegan@dot.ca.gov with any questions regarding this letter.

Sincerely,

Patti

PATRICIA MAURICE
District Branch Chief
Local Development – Intergovernmental Review

cc: State Clearinghouse

CITY OF SAN BRUNO
COMMUNITY DEVELOPMENT DEPARTMENT

June 5, 2015

Barbara Christensen
Director of Community/Government Relations
San Mateo County Community College District
3401 CSM Drive
San Mateo, CA 94402

Re: Notice of Preparation of an Environmental Impact Report for the San Mateo County Community College District 2015 Public Facilities Master Plan Amendment

Dear Ms. Christensen,

Thank you for notifying the City of San Bruno of the opportunity to comment on the scope and content of the Environmental Impact Report (EIR) being prepared for the San Mateo County Community College District 2015 Facilities Master Plan Amendment. All of the City's comments apply to the Skyline campus projects. The City has a particular interest making sure that the EIR evaluates potential environmental impacts that may affect surrounding neighborhoods, City infrastructure and public services:

1. Project Description. Describe the residential project at Skyline College as completely as possible, both the single family homes and multi-family staff/faculty housing, including the layout of streets and lots, approximate size of lots and units, estimated persons per household, and targeted household income.

   Describe the overall construction timeline for all projects on the Skyline campus.

2. Aesthetics. Evaluate the visual impacts of the proposed residential project, including appearance from College Drive and surrounding residences. Evaluate the compatibility of scale and design of the residential project(s) with the surrounding Pacific Heights residential neighborhood. Analyze the consistency of the new residential development with the City's zoning regulations and Residential Design Guidelines.

3. Geology and Soils. Skyline College is in proximity to San Andreas Fault and Alquist-Priolo Earthquake Fault Zone. Geotechnical and soils reports should evaluate the potential impacts of grading the residential subdivision and its potential impacts on the surrounding residential neighborhoods, storm drain infrastructure, and City streets.

4. Hazards and Hazardous Materials. Describe as thoroughly as possible the demolition component of the project, especially the demolition of the Social Science/Creative Arts Building 1 (78,000 square feet) and Building 19 (39,000 square feet), including timing, estimated tons of demolition and construction debris, hazardous materials, transport of debris, and planned haul routes through the City.

5. Noise and Vibration. Pay particular attention to impacts of construction noise, construction equipment, and transport of materials on surrounding residential neighborhoods.

6. Hydrology and Water Quality. This needs to be thoroughly analyzed with consideration given to the current California drought and recently adopted City of San Bruno water conservation measures.

7. Traffic. Analyze traffic impacts of construction equipment trips during the construction period as well as automobile trips from the completed residential project(s) at the following intersections: College/Marisol, College/Skyline, and College/Sharp Park Boulevard.

   Describe and evaluate any TDM measures to encourage the use of creative and effective ways to reduce motor vehicle trips and their associated impacts created by new housing development as well as any increase in usage of expanded facilities. How might TDM measures mitigate GHG impacts?

   Describe options for access to single family homes fronting College Drive and access options for faculty, users, studios, etc.

8. Utilities Systems and Public Services. Evaluate potential impacts on City sewer, water, and storm drain infrastructure and capacity. Evaluate potential impacts on public services provided by the City, including Police, Fire protection, Water, Sewer, and Parks.

Thank you for the opportunity to comment on the scope of issues to be analyzed in the EIR. Should you have any questions regarding the City's comments, please do not hesitate to contact me at (650) 616-7053 or at msullivan@sanbruno.ca.gov.

Sincerely,

Mark Sullivan

Mark Sullivan, AICP
Long-Range Planning Manager

cc: Connie Jackson, City Manager
David Woltering, Community Development Director
Marc Zafferano, City Attorney
Jimmy Tan, City Engineer/Deputy Public Services Director

The Town of
Woodside

June 8, 2015

San Mateo County Community College District
Attention: Barbara Chirstensen
3401 CSM Drive
San Mateo, CA 94402

RE: NOP OF AN EIR FOR THE SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT 2015 FACILITIES MASTER PLAN AMENDMENT

Dear Barbara:

Thank you for sending the Town of Woodside the Notice of Preparation (NOP) for the 2015 Facilities Master Plan Amendment. At this stage in the process, the environmental impact which could have the greatest impact on Woodside is the replacement of Building 1 with a new Kinesiology/Wellness building. Currently, Building 1 is visible upon entering Woodside on Interstate 280, a state scenic highway. Replacement of this building is an opportunity to improve the visual impression when one looks toward the Cañada College campus. I note that the NOP indicates aesthetic analysis will be done as part of the EIR process. Attached to this letter are two pages from the Town of Woodside's General Plan which identify all of the Town's scenic corridors. This information should be considered when conducting the aesthetic analysis.

P.O. Box 620005
2955 Woodside Road
Woodside CA 94062

With a new, public Kinesiology/Wellness facility, which is proposed to be open to the public, it is important that the traffic generation and traffic patterns are carefully analyzed, as both entrances to the College, off of Farm Hill Boulevard and Cañada Road, are within the Town of Woodside. On Cañada Road particularly, any substantial increase in use of the entrance could have an impact on the rural nature of the road and the Town.

I would appreciate a meeting as you begin this process to better understand any details you have on the Facilities Master Plan Amendment, and in particular what the District may have in mind for the design of the Kinesiology/Wellness building.

If you have any questions about these comments, please feel free to contact me at (650) 851-6790 or kbryant@woodsidetown.org.

Sincerely,

Kevin Bryant
Town Manager

650-851-6790
Fax: 650-851-2195
townhall@woodsidetown.org

SCENIC HIGHWAYS AND ROADS

Woodside's scenic highways and roads (see Map CL2, Scenic Corridors) provide vistas which enhance perception of the rural and natural character of the Town.

Designated scenic roads in the Woodside Planning Area include State scenic highways, county scenic roads, and Town scenic roads.

State scenic highways are officially designated by the State. Two significant segments of designated State Scenic Highways are Skyline Boulevard (State Highway 35) and Junipero Serra Freeway (Interstate 280).

County scenic roads are officially designated by the County of San Mateo. No County scenic roads are located within Town limits, but a portion of the Cañada Road County Scenic Corridor exists north of the Town's corporate limits within the Woodside Planning Area.

Town scenic roads are officially designated by the Woodside Town Council, and include:

- Cañada Road
- Kings Mountain Road
- La Honda Road
- Mountain Home Road
- Portola Road
- Sand Hill Road
- Whiskey Hill Road
- Woodside Road (State Highway 84)

SCENIC CORRIDOR PROTECTION

Pursuant to the Woodside Municipal Code (WMC), development that meets any of the following criteria is subject to review by either staff, the Architectural and Site Review Board, or the Planning Commission, depending on size and location:

- Located within State scenic corridors, or
- Located within 1,000 feet and visible from the driving surface of Town scenic roads, or
- Located on ridge tops visible from designated scenic highways and roads.
- The WMC also sets forth special setback requirements for properties within scenic corridors.



Scenic Road.

CIRCULATION SYSTEM MAINTENANCE

Circulation system maintenance in Town includes maintaining and improving Town roads, bikeways, pedestrian pathways, pedestrian trails, and equestrian trails.

The Woodside Municipal Code, Title 3, Administration, describes the basis and requirements for the Road Program of the Town of Woodside, including design parameters, funding sources, prioritization of work, reporting, and the requirement to solicit input from Town residents and committees. This Program applies to work within Town rights-of-way.

Funding sources for transportation improvements within Town rights-of-way (roadways, bikeways, and pedestrian paths) include General Fund monies, State gas taxes, Measure A taxes, traffic safety fines and forfeitures, and road impact fees. Trails Maintenance Fees, collected annually, and General Fund monies are used to maintain public trails within Town rights-of-way and off-road trails within dedicated easements. Occasionally, State and federal grant monies are secured for circulation system improvements.

b. Improve Road Safety

1. Respond to safety issues on public road rights-of-way, such as hazardous pavement conditions, hindrances to sight distance, roadway obstructions, and trees that are structurally defective or damaging infrastructure. The Town has no current plans for the construction of new public roads.
2. Safety improvements on private roads are the responsibility of the private property owners. Utilize available means to require or encourage adequate safety features on private roadways.
3. Review substandard roadway widths and identify and prioritize potential improvements.

c. Maintain roadways

1. Monitor the condition of Town roads, and prioritize preventive maintenance.
2. The maintenance of private roads shall be the responsibility of the private property owners. All newly constructed private roads shall require the recordation of a private road maintenance agreement.

POLICY CL2.2 - PROTECT AND DESIGNATE SCENIC CORRIDORS

State scenic highway legislation does not prohibit development projects within officially designated scenic corridors. The only prohibited structures are outdoor advertising signs. State guidelines do, however, require the adoption of scenic corridor architectural regulations by local governments for those portions of scenic corridors within their jurisdictions. In Woodside, these regulations are extended to local scenic roads.

Strategies:

a. Development review

1. Skyline Boulevard and I-280 are official State Scenic Highways and the scenic corridors along these roads have been defined. Local regulation of development within these scenic corridors, including design review, must be continued in order to maintain official State scenic highway status and to accomplish Town objectives.
2. Continue Architectural and Site Plan Review of all structures and site developments proposed in the scenic corridors along designated State scenic highways and Town scenic roads to ensure appropriateness of design and materials, proper placement of structures, and landscape design.
3. Continue zoning and subdivision regulations in force requiring adequate setbacks of all structures from road rights-of-way and other measures to protect the scenic qualities in all scenic corridors.

b. Scenic corridor designation for State Highway 84

In addition to Skyline Boulevard and I-280, State Highway 84 is indicated in this Plan as a local scenic highway and is recommended to the State for inclusion in the State Scenic Highway System. The Town will continue to seek official State scenic highway status for Highway 84.

Appendix B

Air Quality and Greenhouse Gas Data and Calculations

Appendix B-1: Emissions Modeling Assumptions

Appendix B-2: Air Quality Analysis

Appendix B-3: Vehicle Trip Data

Appendix B-4: Health Risk Assessment

B-1

Emissions Modeling Assumptions

Canada College

Construction Task	2016												2017												2018												2019												2020												2021											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
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Repave Roadways																																																																							

College of San Mateo

Construction Task	2016												2017												2018												2019												2020												2021											
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Skyline College

Construction Task	2016												2017												2018												2019												2020												2021											
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Canada College

Construction Task
B1 - Demo Existing Building & Rebuild
Abatement & Demolish Existing Building
Excavation
Construct New Building
Landscape and Parking Lot 6 Expansion
Occupancy
New Math/Science Building
Excavation
Construct New Building
Landscape and Paving
Occupy New Building
B3 - Modernization/Renovation
Abatement & Selective Demolition
Renovations
Occupancy
B9 - Modernization/Renovation
Abatement & Selective Demolition
Renovations
Occupancy
B13 - Modernization/Renovation
Abatement & Selective Demolition
Renovations
Occupancy
B16/18 - Modernization/Renovation
Abatement & Selective Demolition
Renovations
Occupancy
Campus Site Development
Parking Lot 10 Expansion
Repave Roadways

Existing Operational

Total Project Area	124 acres
Existing annual electricity usage	9.97 kWh/sf/yr
Existing annual natural gas usage	0.35 therm/sf/yr
Total water usage	13 million gallons
Percent of waste recycled per building demolished	minimum 50%
Square footage of buildings demolished	
Building 1, Gymnasium	39,500 sf
Building 19	1,920 sf
Building 20	1,920 sf
Building 21	1,920 sf
Existing parking spaces at lots to be expanded	
Lot 6	558 spaces
Lot 10	20 spaces
Electricity provider	PG&E
Natural gas provider	PG&E
Water provider	City of Redwood City
Solid Waste Provider	Green Waste Recovery

Proposed Operational

Total Project Area	124 acres
Proposed annual electricity usage	10 kWh/sf/yr
Proposed annual natural gas usage	0.4 therm/sf/yr
Proposed annual water consumption	32 gallons/sf
Square footage of buildings built	
Building 1, Kinesiology/Wellness	85,000 sf
# of members for the Kinesiology/Wellness building	5,000 - 6,000
Math/Science/Engineering building	55,000 sf
Proposed parking spaces at lots to be expanded	
Lot 6	558 + 325 = 883 spaces
Lot 10	20 + 200 = 220 spaces
Project related green building practices	
New construction	LEED Gold certified
New & Modernization Projects	Exceed Title 24 by 15%
Proposed emergency diesel generator	No
Potential Renewable Energy Installations	
Solar Thermal	???
Cogeneration system	250,000 kWh/yr

Construction

Electricity for construction	Yes, but unknown
Exported material	Goal is to recycle dirt, use low end of industry standard range
Imported material	Use industry standard metrics
Hours of construction	6am-7pm Mon-Fri, some weekends
Paving with asphalt	
parking lots	14.2 acres
walkways and hardscapes	2.3 acres
total roadways*	2.4 miles (152,064 sq. ft.) = 3.49 acres
Square footage of buildings constructed	
New Math/Science Building	55,000 gsf
Building 1 Kinesiology/Wellness	85,000 gsf
# of new parking spaces at lots to be expanded	
Lot 6	325 spaces
Lot 10	150-200 spaces

* 1 mile = 5,280 feet

College of San Mateo

Construction Task
B1 - Modernization/Renovation
Abatement & Selective Demolition
Renovations
Occupancy
B3 - Modernization/Renovation
Abatement & Selective Demolition
Renovations
Occupancy
B7 - Modernization/Renovation
Abatement & Selective Demolition
Renovations
Occupancy
8 - Demo Existing Building & Rebuild
Abatement & Demolish Existing Building
Construct New Building
Landscape and Paving
Occupancy
B12/19 - Demo Existing Buildings & Build B19
Abatement and Demolish Existing Building
Excavation
Construct New Building
Landscape and Paving
Occupancy
9 - Modernization/Renovation
Abatement & Selective Demolition
Renovations
Occupancy
B17 - Modernization/Renovation
Abatement & Selective Demolition
Renovations
Occupancy
34 - Modernization/Renovation
Abatement & Selective Demolition
Renovations
Occupancy
Campus Site Development
Beethoven Lot Drainage and Paving
Repave Roadways

Existing Operational

Total Project Area	150 acres
Existing annual electricity usage	9.85 kWh/sf/yr
Existing annual natural gas usage	0.67 therm/sf/yr
Total water usage	36.2 million gallons
Percent of waste recycled per building demolished	minimum 50%
Square footage of buildings demolished	
Building 8	55,813 sf
Buildings 12/19	53,232 sf
Existing parking spaces at lots to be expanded	N/A
Electricity provider	PG&E
Natural gas provider	PG&E
Water provider	CA Water Service
Solid Waste Provider	Allied Waste Recology

Proposed Operational

Total Project Area	150 acres
Proposed annual electricity usage	10 kWh/sf/yr
Proposed annual natural gas usage	0.7 therm/sf/yr
Proposed annual water consumption	52 gallons/sf
Square footage of buildings built	
Building 8, Kinesiology/Wellness	80,000 sf
Building 19, Emerging Technologies	53,250 sf
Project related green building practices	
New construction	LEED Gold certified
New & Modernization projects	Exceed Title 24 by 15%
Proposed emergency diesel generator	No
Potential Renewable Energy Installations	
Solar PV	800,000 kWh/yr
Solar Thermal	???
Cogeneration system	250,000 kWh/yr

Construction

Electricity for construction	Yes, but unknown
Exported material	Goal is to recycle dirt, use low end of industry standard range
Imported material	Use industry standard metrics
Hours of construction	6am-7pm Mon-Fri, some weekends
Paving with asphalt	
parking lots	31 acres
walkways and hardscapes	4.7 acres
total roadways*	2.7 miles (171,072 sq. ft.) = 3.93 acres
Square footage of buildings constructed	
Building 8, Kinesiology/Wellness	75,000-80,000 gsf
Building 19, Emerging Technologies	53,250 sf
Modernization and Renovation	
Building 1, Public Safety	24,930 sf
Building 3, Humanities/Arts	28,027 sf
Building 7, Facilities Maintenance	49,402 sf
Building 9, Library/IT	7,500 sf
Building 17, Student Support	10,800 sf
Building 34, Fire Science	1 acre
Corporation Yard	???

* 1 mile = 5,280 feet
Assume road width = 12 feet across (1 lane in each direction)
1 acre = 43,560 sq feet

Skyline College

Construction Task
B1 - Demo Existing Building & Rebuild
Abatement & Demolition
Excavation
Construct New Building
Landscape and Paving
Occupancy
Environmental Studies - New Building
Excavation
Construct New Building
Landscape and Paving
Occupancy
Energy Management - New Building
Excavation
Construct New Building
Landscape and Paving
Occupancy
Residential Complex
Excavation
Construct New Building
Landscape and Paving
Occupancy
B2 - Modernization/Renovation
Abatement & Selective Demolition
Renovations
Occupancy
B5 Modernization/Renovation
Abatement & Selective Demolition
Renovations
Occupancy
B14 - Modernization/Renovation
Abatement & Selective Demolition
Renovations
Occupancy
Campus Site Development
Abatement & Demolition B19 Pacific Heights
Repave Roadways

Existing Operational

Total Project Area	108 acres
Existing annual electricity usage	8.95 kWh/sf/yr
Existing annual natural gas usage	0.52 therm/sf/yr
Total water usage	11.6 million gallons
Percent of waste recycled per building demolished	minimum 50%
Square footage of buildings demolished	
Building 1	77,587 sf
Building 19	38,842 sf
Existing parking spaces at lots to be expanded	
Lot L	112 spaces
Electricity provider	PG&E
Natural gas provider	PG&E
Water provider	City of San Bruno
Solid Waste Provider	Recology San Bruno

Proposed Operational

Total Project Area	108 acres
Proposed annual electricity usage	9 kWh/sf/yr
Proposed annual natural gas usage	0.5 therm/sf/yr
Proposed annual water consumption	22 gallons/sf
Square footage of buildings built	
Building 1, Social Science/Creative Arts	120,000 sf
Environmental Science	18,000-20,000 sf
Boiler Plant**	3,000-5,000 sf
Energy Management Programs	8,500-10,000 sf
Residential Complex*	Up to 71 units
Proposed parking spaces at lots to be expanded	
Lot L	287 spaces
Project related green building practices	
New construction	LEED Gold certified
New and modernization projects	Exceed Title 24 by 15%
Proposed emergency diesel generator	No
Potential Renewable Energy Installations	
Solar PV	200,000 kWh/yr
Solar Thermal	???
Cogeneration system	250,000 kWh/yr

** Assumed as part of Building 1 construction

Construction

Electricity for construction	Yes, but unknown
Exported material	Goal is to recycle dirt, use low end of industry standard range
Imported material	Use industry standard metrics
Hours of construction	6am-7pm Mon-Fri, some weekends
Paving with asphalt	
parking lots	19.8 acres
walkways and hardscapes	3.6 acres
total roadways*	2.5 miles (158,400 sq. ft.) = 3.64 acres
Square footage of buildings constructed	
Environmental Sciences	18,000-20,000 sf
Building 1, Social Science/Creative Arts	120,000 sf
Boiler Plant (part of Building 1)	3,000-5,000 sf (part of Building 1)
Energy Management Programs	8,500-10,000 sf
Residential Complex*	Up to 71 units (47 single fam, 24 multi fam) on 8 acres
# of new parking spaces at lots to be expanded	
Lot L	125-175 spaces

Construction could start as early as Fall 2017; actual construction time would be 3 years to
* completion. (Antin pers. comm.)
1 mile = 5,280 feet
Assume road width = 12 feet across (1 lane in each direction)
1 acre = 43,560 sq feet

Canada College						
Construction Task		Equipment Pieces	Number of Pieces	Hours/day	Horsepower	Load Factor
B1 - Demo Existing Building & Rebuild						
	Abatement & Demolish Existing Building	Concrete/Industrial Saws	1	8	81	0.73
		Rubber Tired Dozers	2	8	255	0.4
		Excavators	3	8	162	0.38
	Excavation	Crawler Tractors	1	8	208	0.4288
		Rubber Tired Dozers	3	8	255	0.4
		Tractors/Loaders/Backhoes	4	8	97	0.37
	Construct New Building	Cranes	2	7	226	0.29
		Forklifts	3	8	89	0.2
		Generator Sets	1	8	84	0.74
		Tractors/Loaders/Backhoes	3	7	97	0.37
		Welders	1	8	46	0.45
		Other Construction Equipment	1	8	172	0.42
	Landscape and Parking Lot 6 Expansion	Cement and Mortar Mixers	2	6	9	0.56
		Pavers	1	8	125	0.42
		Rollers	2	6	80	0.38
		Paving Equipment	2	6	130	0.36
		Tractors/Loaders/Backhoes	1	8	97	0.37
		Skid Steer Loaders	1	8	64	0.3685
		Other Construction Equipment	1	8	172	0.42
	Occupancy					
New Math/Science Building						
	Excavation	Graders	1	8	174	0.41
		Rubber Tired Dozers	1	7	255	0.4
		Tractors/Loaders/Backhoes	1	8	97	0.37
		Crawler Tractors	1	8	208	0.4288
	Construct New Building	Cranes	1	6	226	0.29
		Forklifts	2	6	89	0.2
		Generator Sets	1	8	84	0.74
		Tractors/Loaders/Backhoes	2	6	97	0.37
		Welders	3	8	46	0.45
	Landscape and Paving	Cement and Mortar Mixers	1	6	9	0.56
		Pavers	1	6	125	0.42
		Rollers	1	7	80	0.38
		Paving Equipment	1	8	130	0.36
		Tractors/Loaders/Backhoes	1	8	97	0.37
		Skid Steer Loaders	1	8	64	0.3685
	Occupy New Building					
B3 - Modernization/Renovation						
	Abatement & Selective Demolition (2019)	Concrete/Industrial Saws	1	8	81	0.73
	(62 days)	Rubber Tired Dozers	1	1	255	0.4
		Tractors/Loaders/Backhoes	2	6	97	0.37
	Renovations (2019)	Forklifts	2	6	89	0.2
	(301 days)	Cranes	1	4	226	0.29
	Occupancy					
B9 - Modernization/Renovation						
	Abatement & Selective Demolition (2019)	Concrete/Industrial Saws	1	8	81	0.73
	(45 days)	Rubber Tired Dozers	1	1	255	0.4
		Tractors/Loaders/Backhoes	2	6	97	0.37
	Renovations (2019)	Forklifts	2	6	89	0.2
	(436 days)	Cranes	1	4	226	0.29
	Occupancy					
B13 - Modernization/Renovation						
	Abatement & Selective Demolition (2019)	Concrete/Industrial Saws	1	8	81	0.73
	62 days	Rubber Tired Dozers	1	1	255	0.4
		Tractors/Loaders/Backhoes	2	6	97	0.37
	Renovations (2019)	Forklifts	2	6	89	0.2
	436 days	Cranes	1	4	226	0.29
	Occupancy					

B16/18 - Modernization/Renovation						
	Abatement & Selective Demolition (2019)	Concrete/Industrial Saws	1	8	81	0.73
	62 days	Rubber Tired Dozers	1	1	255	0.4
		Tractors/Loaders/Backhoes	2	6	97	0.37
	Renovations (2019)	Forklifts	2	6	89	0.2
	168 days	Cranes	1	4	226	0.29
	Occupancy					
Campus Site Development						
	Parking Lot 10 Expansion	Concrete/Industrial Saws	1	8	81	0.73
		Rubber Tired Dozers	1	8	255	0.4
		Tractors/Loaders/Backhoes	3	8	97	0.37
		Cement and Mortar Mixers	1	6	9	0.56
		Pavers	1	6	125	0.42
		Rollers	1	7	80	0.38
		Paving Equipment	1	8	130	0.36
		Tractors/Loaders/Backhoes	1	8	97	0.37
	Repave Roadways	Cement and Mortar Mixers	2	6	9	0.56
		Pavers	1	8	125	0.42
		Rollers	2	6	80	0.38
		Paving Equipment	2	6	130	0.36
		Tractors/Loaders/Backhoes	1	8	97	0.37
College of San Mateo						
	Construction Task	Equipment Pieces	Number of Pieces	Hours/day	Horsepower	Load Factor
B1 - Modernization/Renovation						
	Abatement & Selective Demolition (2022)	Concrete/Industrial Saws	1	8	81	0.73
	52 days	Rubber Tired Dozers	1	1	255	0.4
		Tractors/Loaders/Backhoes	2	6	97	0.37
	Renovations (2022)	Forklifts	2	6	89	0.2
	433 days	Cranes	1	4	226	0.29
	Occupancy					
B3 - Modernization/Renovation						
	Abatement & Selective Demolition (2016)	Concrete/Industrial Saws	1	8	81	0.73
	64 days	Rubber Tired Dozers	1	1	255	0.4
		Tractors/Loaders/Backhoes	2	6	97	0.37
	Renovations (2017)	Forklifts	2	6	89	0.2
	289 days	Cranes	1	4	226	0.29
	Occupancy					
B7 - Modernization/Renovation						
	Abatement & Selective Demolition (2022)	*Due to lack of specific information about this phase, emissions from this phase were not quantified				
	62 days					
	Renovations (2022)	*Due to lack of specific information about this phase, emissions from this phase were not quantified				
	290 days					
	Occupancy					
CSM 8 Demo Existing Building & Rebuild						
	Abatement & Demolish Existing Building	Concrete/Industrial Saws	1	8	81	0.73
		Rubber Tired Dozers	1	8	255	0.4
		Tractors/Loaders/Backhoes	3	8	97	0.37
		Crawler Tractors	1	8	208	0.4288
	Construct New Building	Cranes	2	6	226	0.29
		Forklifts	3	6	89	0.2
		Generator Sets	1	8	84	0.74
		Tractors/Loaders/Backhoes	2	6	97	0.37
		Welders	3	8	46	0.45
		Other Construction Equipment	1	8	172	0.42
	Landscape and Paving	Cement and Mortar Mixers	1	6	9	0.56
		Pavers	1	6	125	0.42
		Rollers	1	7	80	0.38
		Paving Equipment	1	8	130	0.36
		Tractors/Loaders/Backhoes	1	8	97	0.37
		Skid Steer Loaders	1	8	64	0.3685
		Other Construction Equipment	1	8	172	0.42
	Occupancy					

B12/19 - Demo Existing Building & Build B19						
Abatement & Demolition	Concrete/Industrial Saws	1	8	81	0.73
	Rubber Tired Dozers	1	8	255	0.4
	Tractors/Loaders/Backhoes	3	8	97	0.37
Excavation	Graders	1	8	174	0.41
	Rubber Tired Dozers	1	7	255	0.4
	Tractors/Loaders/Backhoes	1	8	97	0.37
	Crawler Tractors	1	8	208	0.4288
Construct New Building	Cranes	2	6	226	0.29
	Forklifts	3	6	89	0.2
	Generator Sets	1	8	84	0.74
	Tractors/Loaders/Backhoes	3	6	97	0.37
	Welders	3	8	46	0.45
	Other Construction Equipment	1	8	172	0.42
Landscape and Paving	Cement and Mortar Mixers	1	6	9	0.56
	Pavers	1	6	125	0.42
	Rollers	1	7	80	0.38
	Paving Equipment	1	8	130	0.36
	Tractors/Loaders/Backhoes	1	8	97	0.37
	Skid Steer Loaders	1	8	64	0.3685
Occupancy					
9 - Modernization/Renovation					
Abatement & Selective Demolition (2017)	Concrete/Industrial Saws	1	8	81	0.73
60 days	Rubber Tired Dozers	1	1	255	0.4
	Tractors/Loaders/Backhoes	2	6	97	0.37
Renovations (2017)	Forklifts	2	6	89	0.2
433 days	Cranes	1	4	226	0.29
Occupancy					
B17 - Modernization/Renovation					
Abatement & Selective Demolition (2016)	Concrete/Industrial Saws	1	8	81	0.73
65 days	Rubber Tired Dozers	1	1	255	0.4
	Tractors/Loaders/Backhoes	2	6	97	0.37
Renovations (2017)	Forklifts	2	6	89	0.2
298 days	Cranes	1	4	226	0.29
Occupancy					
34 - Modernization/Renovation					
Abatement & Selective Demolition (2019)	Concrete/Industrial Saws	1	8	81	0.73
62 days	Rubber Tired Dozers	1	1	255	0.4
	Tractors/Loaders/Backhoes	2	6	97	0.37
Renovations (2019)	Forklifts	2	6	89	0.2
162 days	Cranes	1	4	226	0.29
Occupancy					
Campus Site Development					
Beethoven Lot Drainage and Paving					
Repave Roadways	Cement and Mortar Mixers	2	6	9	0.56
	Pavers	1	8	125	0.42
	Rollers	2	6	80	0.38
	Paving Equipment	2	6	130	0.36
	Tractors/Loaders/Backhoes	1	8	97	0.37

Skyline College					
Construction Task	Equipment Pieces	Number of Pieces	Hours/day	Horsepower	Load Factor
B1 - Demo Existing Building & Rebuild					
Abatement & Demolition	Concrete/Industrial Saws	1	8	81	0.73
	Rubber Tired Dozers	1	8	255	0.4
	Tractors/Loaders/Backhoes	3	8	97	0.37
Excavation	Graders	1	8	174	0.41
	Rubber Tired Dozers	1	7	255	0.4
	Tractors/Loaders/Backhoes	1	7	97	0.37
	Crawler Tractors	1	8	208	0.4288
Construct New Building	Cranes	2	6	226	0.29
	Forklifts	3	6	89	0.2
	Generator Sets	1	8	84	0.74
	Tractors/Loaders/Backhoes	3	6	97	0.37
	Welders	3	8	46	0.45
	Other Construction Equipment	1	8	172	0.42
Landscape and Paving	Cement and Mortar Mixers	1	6	9	0.56
	Pavers	1	6	125	0.42
	Rollers	1	7	80	0.38
	Paving Equipment	1	8	130	0.36
	Tractors/Loaders/Backhoes	1	8	97	0.37
	Skid Steer Loaders	1	8	64	0.3685
Occupancy					
Environmental Studies - New Building					
Excavation	Graders	1	8	174	0.41
	Tractors/Loaders/Backhoes	1	8	97	0.37
Construct New Building	Cranes	1	4	226	0.29
	Forklifts	2	6	89	0.2
	Tractors/Loaders/Backhoes	2	8	97	0.37
	Other Construction Equipment	1	8	172	0.42
Landscape and Paving	Cement and Mortar Mixers	4	6	9	0.56
	Pavers	1	6	125	0.42
	Rollers	1	7	80	0.38
	Tractors/Loaders/Backhoes	1	7	97	0.37
	Skid Steer Loaders	1	8	64	0.3685
Occupancy					
Energy Management - New Building					
Excavation	Graders	1	8	174	0.41
	Tractors/Loaders/Backhoes	1	8	97	0.37
Construct New Building	Cranes	1	4	226	0.29
	Forklifts	2	6	89	0.2
	Tractors/Loaders/Backhoes	2	8	97	0.37
	Other Construction Equipment	1	8	172	0.42
Landscape and Paving	Cement and Mortar Mixers	4	6	9	0.56
	Pavers	1	7	125	0.42
	Rollers	1	7	80	0.38
	Tractors/Loaders/Backhoes	1	7	97	0.37
	Skid Steer Loaders	1	8	64	0.3685
Occupancy					

Residential Complex						
	Excavation	Graders	1	8	174	0.41
		Rubber Tired Dozers	1	7	255	0.4
		Tractors/Loaders/Backhoes	1	8	97	0.37
	Construct New Building	Cranes	1	6	226	0.29
		Forklifts	1	6	89	0.2
		Generator Sets	1	8	84	0.74
		Tractors/Loaders/Backhoes	1	6	97	0.37
		Welders	3	8	46	0.45
	Landscape and Paving	Cement and Mortar Mixers	1	6	9	0.56
		Pavers	1	6	125	0.42
		Rollers	1	7	80	0.38
		Paving Equipment	1	8	130	0.36
		Tractors/Loaders/Backhoes	1	8	97	0.37
		Skid Steer Loaders	1	8	64	0.3685
	Occupancy					
B2 - Modernization/Renovation						
	Abatement & Selective Demolition (2024)	Concrete/Industrial Saws	1	8	81	0.73
	60 days	Rubber Tired Dozers	1	1	255	0.4
		Tractors/Loaders/Backhoes	2	6	97	0.37
	Renovations (2024)	Forklifts	2	6	89	0.2
	417 days	Cranes	1	4	226	0.29
	Occupancy					
B5 Modernization/Renovation						
	Abatement & Selective Demolition (2022)	Concrete/Industrial Saws	1	8	81	0.73
	62 days	Rubber Tired Dozers	1	1	255	0.4
		Tractors/Loaders/Backhoes	2	6	97	0.37
		Skid Steer Loaders	1	8	64	0.3685
	Renovations (2022)	Forklifts	2	6	89	0.2
	278 days	Cranes	1	4	226	0.29
	Occupancy					
B14 - Modernization/Renovation						
	Abatement & Selective Demolition (2018)	Concrete/Industrial Saws	1	8	81	0.73
	63 days	Rubber Tired Dozers	1	1	255	0.4
		Tractors/Loaders/Backhoes	2	6	97	0.37
	Renovations (2018)	Forklifts	2	6	89	0.2
	208 days	Cranes	1	4	226	0.29
	Occupancy					
Campus Site Development						
	Abatement & Demolition B19 Pacific Heights	Concrete/Industrial Saws	1	8	81	0.73
		Rubber Tired Dozers	1	8	255	0.4
		Tractors/Loaders/Backhoes	3	8	97	0.37
	Parking Lot L Expansion	Cement and Mortar Mixers	1	6	9	0.56
		Pavers	1	6	125	0.42
		Rollers	1	7	80	0.38
		Paving Equipment	1	8	130	0.36
		Tractors/Loaders/Backhoes	1	8	97	0.37
	Repave Roadways	Cement and Mortar Mixers	2	6	9	0.56
		Pavers	1	8	125	0.42
		Rollers	2	6	80	0.38
		Paving Equipment	2	6	130	0.36
		Tractors/Loaders/Backhoes	1	8	97	0.37

B-2
Air Quality Analysis

Construction BTUs

Canada			
29,666 MT	22.2 lbs/gal	129,488 BTU/gal	
2,204.60 lbs/MT	65401663.6 lbs	2946020.883 gallons	
65401664 lbs	2946020.883 gallons	381474352082.74 BTU	
CSM			
29,950 MT	22.2 lbs/gal	129,488 BTU/gal	
2,204.60 lbs/MT	66027770 lbs	2974223.874 gallons	
66027770 lbs	2974223.874 gallons	385126300980.18 BTU	
Skyline			
22,782 MT	22.2 lbs/gal	129,488 BTU/gal	
2,204.60 lbs/MT	50225197.2 lbs	2262396.27 gallons	
50225197 lbs	2262396.27 gallons	292953168244.76 BTU	

On road Operational BTUs proposed

health club	1,380,406 vmt			
canada campus proposed	2,461,827 vmt	3,842,233	Canada vmt total	17993177139 Canada BTU
csm campus proposed	5,930,584 vmt	5,930,584	CSM vmt total	27772924872 CSM BTU
skyline campus proposed	6,332,698 vmt			
res complex to canada	79,071 vmt			
res complex to csm	48,566 vmt			
res complex offsite	1,221,528 vmt			
res complex onsite	9,704 vmt	7,691,567	Skyline vmt total	36019608261 Skyline BTU
	17,464,384 vmt total			
	4,683 BTU/vmt			
	81785710272 BTU total			

Off road Operational BTUs proposed (unmitigated)

Canada electricity	1.40E+06 kWh/yr	3,416 BTU/kWh	4782400000.00 BTU
Canada natural gas	5.60E+06 kBTU/yr	1,000 BTU/kBTU	5598600000.00 BTU
CSM elec	1.33E+06 kWh/yr	3,416 BTU/kWh	4543280000.00 BTU
CSM nat gas	9.32E+06 kBTU/yr	1,000 BTU/kBTU	9320000000.00 BTU
Skyline elec	2.33E+06 kWh/yr	3,416 BTU/kWh	7950398400.00 BTU
Skyline nat gas	1.29E+07 kBTU/yr	1,000 BTU/kBTU	12926900000.00 BTU
			17276078400.00 total electricity BTU
			27845500000.00 total natural gas BTU

Off road Operational BTUs proposed (mitigated)

Canada electricity	8.40E+05 kWh/yr	3,416 BTU/kWh	2868586000.00 BTU
Canada natural gas	3.36E+06 kBTU/yr	1,000 BTU/kBTU	3359160000.00 BTU
CSM elec	-7.50E+02 kWh/yr	3,416 BTU/kWh	-2562000.00 BTU
CSM nat gas	5.59E+06 kBTU/yr	1,000 BTU/kBTU	5594900000.00 BTU
Skyline elec	1.30E+06 kWh/yr	3,416 BTU/kWh	4428194960.00 BTU
Skyline nat gas	7.76E+06 kBTU/yr	1,000 BTU/kBTU	7756450000.00 BTU
			7294218960.00 total electricity BTU
			16710510000.00 total natural gas BTU

Total proposed operational (unmitigated)

126907288672.00 BTU

28374177139.00 canada total
41636204872.00 csm total
56896906661.00 skyline total

Total proposed operational (mitigated)

105790439232.00 BTU

24220923139.00 canada total
33365262872.00 csm total
48204253221.00 skyline total

On road Operational BTUs existing

canada campus existing	2,461,827 vmt	11528735841 Canada BTU
csm campus existing	5,930,002 vmt	27770199366 CSM BTU
skyline campus existing	6,332,698 vmt	29656024734 Skyline BTU
	14,724,527 vmt total	
	4,683 BTU/vmt	
	68954959941 BTU total	

Off road Operational BTUs existing

canada electricity	4.51E+05 kWh/yr	3,416 BTU/kWh	1541442672.00 BTU
canada natural gas	1.58E+06 kBTU/yr	1,000 BTU/kBTU	1583650000.00 BTU
san mateo elec	1,070,000 kWh/yr	3,416 BTU/kWh	3655120000.00 BTU
san mateo nat gas	7.30E+06 kBTU/yr	1,000 BTU/kBTU	7300000000.00 BTU
skyline elec	1.04E+06 kWh/yr	3,416 BTU/kWh	3559608640.00 BTU
skyline nat gas	6.05E+06 kBTU/yr	1,000 BTU/kBTU	6052910000.00 BTU
			8756171312.00 total electricity BTU
			14936560000.00 total natural gas BTU

Total existing operational

92647691253.00 BTU

14653828513.00 canada total
38725319366.00 csm total
39268543374.00 skyline total

B-3
Vehicle Trip Data

SMCCCD - Skyline College Residential Development

Trip Generation Estimates

Land Use	Size	Units	Daily Rates	Daily Trips	AM Peak Hour						PM Peak Hour					
					Pk-Hr Rate	Splits In	Splits Out	In	Out	Total	Pk-Hr Rate	Splits In	Splits Out	In	Out	Total
Multi-family building for faculty and staff[1]	24	DUs	6.65	160	0.51	0.20	0.80	2	10	12	0.62	0.65	0.35	10	5	15
Single-family homes for general public[2]	47	DUs	9.52	447	0.75	0.25	0.75	9	26	35	1.00	0.63	0.37	30	17	47
New Trips Generated				**607**				**11**	**36**	**47**				**40**	**22**	**62**
New trips distributed on-site (Skyline College)[3]				*30*				*1*	*5*	*6*				*5*	*3*	*8*
New trips distributed off-site				*577*				*10*	*31*	*41*				*35*	*19*	*54*

Notes:

DUs = dwelling units

[1] Trip rates based on Apartment (Land Use 220), ITE Trip Generation, 9th Edition, 2012. Average rates are used.

[2] Trip rates based on Single-Family Detached Housing (Land Use 210), ITE Trip Generation, 9th Edition, 2012. Average rates are used.

[3] It is assumed that 50 percent of the multi-family residential units would be occupied by Skyline College faculty and staff (on-site) and remaining units would be occupied by Canada College and College of San Mateo faculty and staff (off-site).

SMCCCD - Canada College Gym Facility

Trip Generation Estimates

Land Use	Size	Units	Daily Rates	Daily Trips	AM Peak Hour						PM Peak Hour					
					Pk-Hr Rate	Splits In	Splits Out	In	Out	Total	Pk-Hr Rate	Splits In	Splits Out	In	Out	Total
Building 1 Health Club[1]	6,000	members	0.13	799	0.02	62%	38%	73	46	119	0.02	59%	41%	82	57	139

Notes:

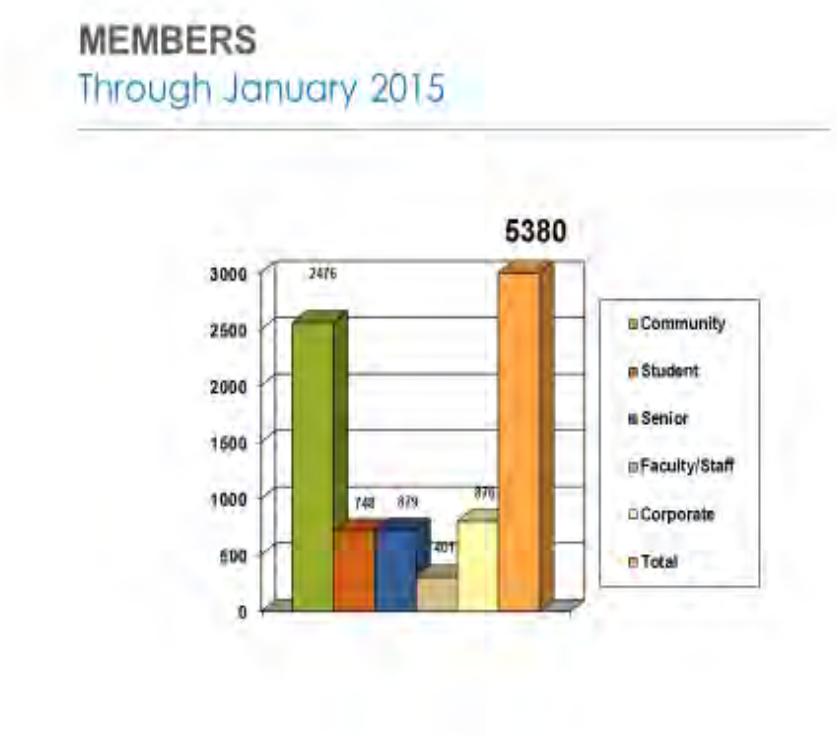
ksf = 1,000 square feet gross area

[1] Trip rates based on the check-ins and membership data for the existing College of San Mateo health club. See Appendix X for trip rate calculations.

College of San Mateo Health Club Usage and Vehicle Trip Rate Estimates

		Daily Vehicle Trip Rates	Weekday Check-ins[1]	AM Peak Hour (weekday)						PM Peak Hour (weekday)					
				Pk-Hr Trip Rate	Split		In[1]	Out[1]	Total Check-Ins & -Outs[2]	Pk-Hr Trip Rate	Split		In[1]	Out[1]	Check-Ins & -Outs[3]
					In	Out					In	Out			
Member Check-Ins															
All Members	5,380		911				84	52	136				94	65	159
General Public Members[4]	4,231		716				66	41	107				74	51	125
Vehicle Trip and Trip Rate Estimates															
All Members[5]	5,380	0.13	716	0.02	62%	38%	66	41	107	0.02	59%	41%	74	51	125

Notes:
Table developed by Hexagon Transportation Consultants.
1. Based on 2015 January Check-Ins Data collected by SMCCCD. There were 5,380 members as of January 2015.
2. AM peak hour check-ins & -outs include 84 check-ins in 8-9 am and 52 check-ins in 7-8 am which was assumed to exit in 8-9 am.
3. PM peak hour check-ins & -outs include 94 check-ins in 5-6 pm and 65 check-ins in 4-5 pm which was assumed to exit in 5-6 pm.
4. It was assumed that faculty, staff, and student members go to the club before and after work or school, so they don't generate additional vehicle trips. Therefore, check-ins were calculated for the general public (GP) members, using the ratio of GP members to all members.
5. Daily and peak-hour trip rates were calculated using chick-ins from GP members. It is assumed one vehicle trip per check-in.



B-4
Health Risk Assessment

San Mateo College HRA

Emission Rate

Building	DPM (tons)	PM2.5 Dust	Hours/Day	Days	DPM (g/sec)	PM2.5 D (g/sec)	Con Start	Con End	ED (Years)
Building 3	0.1232	0.00000	8	558	0.006955	0.000000	12/22/2016	7/3/2018	
Building 1	0.1232	0.00000	8	762	0.005093	0.000000	1/12/2022	2/13/2024	
Building 9	0.1232	0.00000	8	757	0.005126	0.000000	7/3/2017	7/30/2019	
Building 17	0.1232	0.00000	8	569	0.006820	0.000000	10/26/2016	5/18/2018	
Building 34	0.1232	0.00000	8	377	0.010294	0.000000	7/31/2019	8/11/2020	
Buliding 8	0.1355	0.00417	8	956	0.004465	0.000137	5/31/2019	1/11/2022	
Bethn Lot	0.0197	0.00000	8	154	0.004029	0.000000	2/15/2024	7/18/2024	
Building 19	0.4633	0.06627	8	1032	0.014141	0.002023	2/1/2017	11/30/2019	
						Total	10/26/2016	7/18/2024	5.5

Cancer Risk Assessment

Methodolology, OEHHA Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments, March 6, 2015
http://oehha.ca.gov/air/hot_spots/hotspots2015.html
Assumed to start in 3rd trimester for residential

Dose: $Dose\text{-}air = C_{air} \times \{BR/BW\} \times A \times EF \times 10^{-6}$

Cancer Risk: $RISK_{inh\text{-}res} = DOSE_{air} \times CPF \times ASF \times ED/AT \times FAH$

		Dose-Inhallation by age					
Receptor	Annual Conc. (ug/m3)	3rd trimester	0<2	2<9	2<16	16<30	16-70
Maximum Receptor - Onsite Res	0.0224	7.74E-06	2.34E-05	1.35E-05	1.23E-05	5.59E-06	4.99E-06
Maximum Receptor - Offsite Res	0.0357	1.24E-05	3.73E-05	2.16E-05	1.96E-05	8.93E-06	7.97E-06
Offsite School	0.0165	4.88E-07	2.44E-06	1.30E-06	1.06E-06	4.88E-07	4.67E-07
Offsite Park	0.0026	2.20E-08	1.10E-07	5.87E-08	4.77E-08	2.20E-08	2.11E-08

	Individual Cancer Risk						
Receptor	3rd trimester	0<2	2<9	2<16	16<30	16-70	summed risk
Maximum Receptor - Onsite Res	3.04E-07	7.34E-06	2.09E-06	0.00E+00	0.00E+00	0.00E+00	9.734E-06
Maximum Receptor - Offsite Res	4.85E-07	1.17E-05	3.34E-06	0.00E+00	0.00E+00	0.00E+00	1.554E-05
Offsite School	1.92E-08	7.66E-07	2.01E-07	0.00E+00	0.00E+00	0.00E+00	9.863E-07
Offsite Park	8.65E-10	3.46E-08	9.07E-09	0.00E+00	0.00E+00	0.00E+00	4.455E-08

Summed Risk	Unmit per million	with onsite MM	with Tier 4 (90% reduction over unmit)	With MERV-15
Maximum Receptor - Onsite Res	9.73	5.35	0.973	
Maximum Receptor - Offsite Res	15.54	8.55	1.554	-
Offsite School	0.99	0.54	0.099	-
Offsite Park	0.04	0.02	0.004	-

Chronic Hazard

Chronic hazard assessment is based on annual average exposure and chronicRELs. Chronic REL for DPM is 5.

Receptor	Annual Conc. (ug/m3)	Chronic HI unmit	Chronic HI mit	with Tier 4 (90% reduction over unmit)	With MERV-15
Maximum Receptor - Onsite Res	0.022350	0.00447	0.00246	-	-
Maximum Receptor - Offsite Res	0.035690	0.00714	0.00393	-	-
Offsite School	0.016480	0.00330	0.00181	-	-
Offsite Park	0.002570	0.00051	0.00028	-	-

PM2.5 Concentration

Assessment based on annual average exposure to total PM2.5 (exhaust + dust)

Receptor	Annual Conc. (ug/m3) unmit	Annual Conc. (ug/m3) mit	with Tier 4 (90% reduction over unmit)	With MERV-15 and Tier 4
Maximum Receptor - Onsite Res	0.0227	0.0124	0.002	0.0003
Maximum Receptor - Offsite Res	0.0368	0.0201	0.004	
Offsite School	0.0167	0.0092	0.002	
Offsite Park	0.0026	0.0014	0.000	

ED, Exposure Duration (years)		3rd trimester	0<2	2<9	2<16	16<30	16-70	
	Res and Park	0.25	2	3.28	0	0	0	Equation 8.2.4 A, OEHHA 2015
	School	0.25	2	3.28	0	0	0	Equation 8.2.4 A, OEHHA 2015

Skyline College HRA

Emission Rate

Building	DPM (tons)	PM2.5 Dust	Hours/Day	Days	DPM (g/sec)	PM2.5 D (g/sec)	Con Start	Con End	Years
Env Studies	0.13	0.0000	8	561	0.007035	0.00000	2/28/2018	9/12/2019	
Building 14	0.12	0.0000	8	444	0.008740	0.00000	9/18/2018	12/6/2019	
Energy Mgmt.	0.10	0.0000	8	446	0.006752	0.00000	6/28/2017	9/17/2018	
Building 5	0.13	0.0000	8	545	0.007641	0.00000	8/11/2022	2/7/2024	
Building 2	0.12	0.0000	8	729	0.005323	0.00000	2/8/2024	2/6/2026	
Building 1 (boiler + utilities + Social sciences)	0.20	0.0307	8	1309	0.004858	0.00074	1/9/2019	8/10/2022	
Parcel 8 (residential)	0.08	0.0942	8	1188	0.002105	0.00250	10/1/2017	1/1/2021	2.3
Parking Expansion	0.04	0.0029	8	414	0.003365	0.00022	2/9/2026	3/30/2027	
						Total	6/28/2017	3/30/2027	7.0

Cancer Risk Assessment

Methodolology, OEHHA Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments, March 6, 2015
http://oehha.ca.gov/air/hot_spots/hotspots2015.html
Assumed to start in 3rd trimester for residential

Dose: $Dose\text{-}air = C_{air} \times \{BR/BW\} \times A \times EF \times 10^{-6}$

Cancer Risk: $RISK_{inh\text{-}res} = DOSE_{air} \times CPF \times ASF \times ED/AT \times FAH$

		Dose-Inhallation by age					
Receptor	Annual Conc. (ug/m3)	3rd trimester	0<2	2<9	2<16	16<30	16-70
Maximum Receptor - Onsite Res	0.1044	3.61E-05	1.09E-04	6.32E-05	5.73E-05	2.61E-05	2.33E-05
Maximum Receptor - Offsite Res	0.1066	3.69E-05	1.11E-04	6.45E-05	5.85E-05	2.67E-05	2.38E-05
Offsite Park	0.0143	1.22E-07	6.12E-07	3.26E-07	2.65E-07	1.22E-07	1.17E-07
Offsite Jail	0.0038	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.63E-07	6.72E-07

	Individual Cancer Risk						
Receptor	3rd trimester	0<2	2<9	2<16	16<30	16-70	summed risk
Maximum Receptor - Onsite	1.42E-06	3.43E-05	7.13E-06	0.00E+00	0.00E+00	0.00E+00	4.28E-05
Maximum Receptor - Offsite	1.45E-06	3.50E-05	1.44E-05	0.00E+00	0.00E+00	0.00E+00	5.082E-05
Offsite Park	4.81E-09	1.92E-07	7.27E-08	0.00E+00	0.00E+00	0.00E+00	2.698E-07
Offsite Jail	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.40E-08	0.00E+00	8.395E-08

Summed Risk	Unmit per million	with onsite MM (CC-AQ-2 and AQ-4)	with Tier 4 (90% reduction over unmit)
Maximum Receptor - Onsite	42.85	23.57	4.285
Maximum Receptor - Offsite	50.82	27.95	5.082
Offsite Park	0.27	0.15	0.027
Offsite Jail	0.08	0.05	0.008

Chronic Hazard

Chronic hazard assessment is based on annual average exposure and chronicRELs. Chronic REL for DPM is 5.

Receptor	Annual Conc. (ug/m3)	Chronic HI	with onsite MM	with Tier 4 (90% reduction over unmit)	With MERV-15	After MM
Maximum Receptor - Onsite Res	0.104410	0.02088	0.01	0.002	0.0017	0.0017
Maximum Receptor - Offsite Res	0.106580	0.02132	0.01	0.002	-	0.01
Offsite Park	0.014280	0.00286	0.00	0.000	-	0.00
Offsite Jail	0.003790	0.00076	0.00	0.000	-	0.00

PM2.5 Concentration

Assessment based on annual average exposure to total PM2.5 (exhaust + dust)

Receptor	Annual Conc. (ug/m3) unmit	Annual Conc. (ug/m3) mit	with Tier 4 (90% reduction over unmit)	With MERV-15	After MM
Maximum Receptor - Onsite Res	0.2874	0.1434	0.029	0.022	0.022
Maximum Receptor - Offsite Res	0.1326	0.0708	0.013	-	0.071
Offsite Park	0.0174	0.0093	0.002	-	0.009
Offsite Jail	0.0046	0.0025	0.000	-	0.002

ED, Exposure Duration (years)	3rd trimester	0<2	2<9	2<16	16<30	16-70	
Offsite (Res and Park)	0.25	2	4.72	0	0	0	Equation 8.2.4 A, OEHHA 2015
Offsite (Jail)					7	0	Equation 8.2.4 A, OEHHA 2015
Onsite Residential	0.25	2	2.39	0	0	0	Equation 8.2.4 A, OEHHA 2015 (completed in 2021; exposed to onsite pollution thereafter)

Cañada College HRA

Emission Rate

Building	DPM (tons)	PM2.5 Dust	Hours/Day	Days	DPM (g/sec)	PM2.5 D (g/sec)	Con Start	Con End	ED (Years)
Building 1 + Lot 6	0.214	0.00109	8	967	0.006972	0.000036	10/5/2016	5/30/2019	1.9
building 1	*0.193*	*0.0009*	*8*	*849*	*0.007146*	*0.000033*			
lot 6	*0.021*	*0.0002*	*8*	*118*	*0.005723*	*0.000054*			
Building 3	0.07	0.00000	8	537	0.003975	0.000000	5/29/2019	11/16/2020	1.1
Building 9	0.07	0.00000	8	698	0.003058	0.000000	5/29/2019	4/26/2021	1.4
Building 13	0.07	0.00000	8	758	0.002816	0.000000	5/29/2019	6/25/2021	1.5
Building 16	0.03	0.00000	8	384	0.002779	0.000000	5/29/2019	6/16/2020	0.8
Building 18	0.03	0.00000	8	384	0.002779	0.000000	5/29/2019	6/16/2020	0.8
New Math	0.0713	0.02726	8	700	0.003210	0.001227	6/28/2017	5/29/2019	1.4
Lot 10 Expansion	0.021	0.00020	8	118	0.005723	0.000054	6/26/2021	10/22/2021	0.2
	0.79					Total	10/5/2016	10/22/2021	3.6

Cancer Risk Assessment

Methodolology, OEHHA Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments, March 6, 2015
http://oehha.ca.gov/air/hot_spots/hotspots2015.html
Assumed to start in 3rd trimester for residential

Dose: $\text{Dose-air} = C_{air} \times \{BR/BW\} \times A \times EF \times 10^{-6}$

Cancer Risk: $\text{RISK}_{inh\text{-}res} = \text{DOSE}_{air} \times CPF \times ASF \times ED/AT \times FAH$

		Dose-Inhallation by age					
Receptor	Annual Conc. (ug/m3)	3rd trimester	0<2	2<9	2<16	16<30	16-70
Maximum Receptor - Onsite	0.028390	9.83E-06	2.97E-05	1.72E-05	1.56E-05	7.11E-06	6.34E-06
Maximum Receptor - Offsite	0.09315	3.22E-05	9.74E-05	5.64E-05	5.11E-05	2.33E-05	2.08E-05

	Individual Cancer Risk						
Receptor	3rd trimester	0<2	2<9	2<16	16<30	16-70	summed risk
Maximum Receptor - Onsite	3.86E-07	9.33E-06	1.10E-06	0.00E+00	0.00E+00	0.00E+00	1.08E-05
Maximum Receptor - Offsite	1.27E-06	3.06E-05	3.62E-06	0.00E+00	0.00E+00	0.00E+00	3.548E-05

Summed Risk	Unmit per million	with onsite MM	with Tier 4 (90% reduction over unmit)
Maximum Receptor - Onsite	10.81	5.95	1.081
Maximum Receptor - Offsite	35.48	19.52	3.548

Chronic Hazard

Chronic hazard assessment is based on annual average exposure and chronicRELs. Chronic REL for DPM is 5.

Receptor	Annual Conc. (ug/m3)	Chronic HI unmit	Chronic HI mit	with Tier 4 (90% reduction over unmit)	
Maximum Receptor - Onsite	0.028390	0.01	0.00	0.001	
Maximum Receptor - Offsite	0.09315	0.02	0.01	0.002	--

PM2.5 Concentration

Assessment based on annual average exposure to total PM2.5 (exhaust + dust)

Receptor	Annual Conc. (ug/m3) unmit	Annual Conc. (ug/m3) mit	with Tier 4 (90% reduction over unmit)	With MERV-15
Maximum Receptor - Onsite	0.03	0.02	0.003	0.00
Maximum Receptor - Offsite	0.10	0.06	0.010	--

ED, Exposure Duration (years)								
	Res	0.25	2	1.36	0	0	0	Equation 8.2.4 A, OEHHA 2015

Dose and Risk Factors for all Schools (ED varies)

Breathing Rates by bin and use	3rd Trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years	
Daily Breath Rate (L/kg-day) Residential	361	1090	631	572	261	233	OEHHA 2015, Table 5.6, 95th %ile for 3rdtri-2yrs old; 80th% otherwise (from SJVACPD guidance)
Daily Breath Rate (L/kg-day) Park	240	1200	640	520	240	230	OEHHA 2015, Table 5.8 (95th, moderate) for all bins but 3rd tri, which was taken from SJVUAPCD's draft guidance
Daily Breath Rate (L/kg-day) School	240	1200	640	520	240	230	same as park
Daily Breath Rate (L/kg-day) Jail					210	185	OEHHA 2015, Table 5.6, only 16+

EF, Fraction of time exposed							
Residential	0.96	0.96	0.96	0.96	0.96	0.96	OEHHA 2015, page 5-24, 350 days/yr
Park	0.036	0.036	0.036	0.036	0.036	0.036	3x/week, 2 hours/day, for 9 years
School	0.12	0.12	0.12	0.12	0.12	0.12	180 days/yr, 6 hours/day
Jail					0.96	0.96	OEHHA 2015, page 5-24, 350 days/yr

A	1	1	1	1	1	1	OEHHA 2015, page 5-24
Conversion Factor	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	(mg/ug + m3/L)
CPF, DPM ([mg/kg-day]$^{-1}$)	1.1	1.1	1.1	1.1	1.1	1.1	OEHHA 2015, Table 7.1
Average Age Sensitivity Factor - residence	10	10	3	3	1	1	OEHHA 2015, Table 8.3
AT, Average Time (days)	70	70	70	70	70	70	Averaging time for lifetime cancer risk
FAH	1.00	1.00	1.00	1.00	1.00	1.00	OEHHA 2015, Table 8.4
Chronic REL, respiratory, DPM	5						OEHHA 2015, Table 6.3

Mitigation Reductions			
MERV	15%	Achieves a 85% PM removal efficiency	
BAAQMD PM10 exh reduction	55%	Achieves a 45% PM10 exhaust reduction	Mitigation Measure AQE-2
PM dust reduction	47%	Achieves a 53% PM2.5 dust reduction	Mitigation Measure AQE-4
PM10 exh reduction, tier 4	10%	Achieves a 90% PM10 exhaust reduction (relative to unmitgated)	Mitigation Measure AQE-5

San Mateo Ambient

Source ID	Name	Address	Cancer	Hazard	PM2.5	
17347	San Mateo	1700 W Hillsdale Blvd	1.6	0.00	0.00	Geneator, adjusted for distance to campus (onsite receptor); 900 feet
15349	San Mateo	1700 W Hillsdale Blvd	3.6	0.03	1.56	
SR 92	SR 92	-	3.0	0.00	0.03	<Measured at 500 feet
Total			8.2	0.03	1.6	(apply to offsite receptorss)
17347	San Mateo	1700 W Hillsdale Blvd	0.2	0.00	0.00	WITH MERV
15349	San Mateo	1700 W Hillsdale Blvd	0.5	0.00	0.23	
SR 92	SR 92	-	0.4	0.00	0.00	
			1.2	0.00	0.24	(only apply to onsite receptors)

Skyline Ambient

Source ID	Name	Address	Cancer	Hazard	PM2.5	
15348	Skyline College	3300 College Drive	1	0.01	0.57	
SR35	SR35	-	0	0.00	0.00	<Technically not within 1,000 feet of the campus, but residences at the 1,000 foot line could be affected by t
Total			2	0.01	0.6	
		WITH MERV	0	0.00	0.09	
			0	0.00	0.00	
			0	0.00	0.09	

Canada Ambient

Source ID	Name	Address	Hazard	Cancer	PM2.5	
I280	I280	-	0.00	3	0.05	<Technically not within 1,000 feet of the campus, but residences at the 1,000 foot line could be affected by both sources
Total			0.00	3	0.0	
		WITH MERV	0.00	0	0.01	
			0.00	0	0.01	

AERMOD output sheets available upon request

Appendix C

Biological Resources Documentation

Appendix C-1: USFWS Endangered and Threatened Species Letter

Appendix C-2: CNDDB Species List

Appendix C-3: CNPS Species List

C-1

USFWS Species Letter

United States Department of the Interior
FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825

April 14, 2015

Document Number: 150414115703

Eric Christensen
ICF International
620 Folsom St. 2nd Floor
San Francisco, CA 94107

Subject: Not specified

Dear: Mr. Christensen

We are sending this official species list in response to your April 14, 2015 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be July 13, 2015.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found here.

Endangered Species Division

TAKE PRIDE IN AMERICA

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825

November 20, 2013

Document Number: 131120125516

Eric Christensen
ICF International
75 E. Santa Clara
San Jose, CA 95113

Subject: Species List for SMCCC

Dear: Mr. Christensen

We are sending this official species list in response to your November 20, 2013 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be February 18, 2014.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found here.

Endangered Species Division

TAKE PRIDE IN AMERICA

C-2

CNDDB Species List

U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 131120125516

Database Last Updated: September 18, 2011

Quad Lists

Listed Species

Invertebrates

Euphydryas editha bayensis

bay checkerspot butterfly (T)

Critical habitat, bay checkerspot butterfly (X)

Fish

Eucyclogobius newberryi

tidewater goby (E)

Hypomesus transpacificus

delta smelt (T)

Oncorhynchus kisutch

coho salmon - central CA coast (E) (NMFS)

Oncorhynchus mykiss

Central California Coastal steelhead (T) (NMFS)

Central Valley steelhead (T) (NMFS)

Critical habitat, Central California coastal steelhead (X) (NMFS)

Oncorhynchus tshawytscha

Central Valley spring-run chinook salmon (T) (NMFS)

winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Ambystoma californiense

California tiger salamander, central population (T)

Rana draytonii

California red-legged frog (T)

Critical habitat, California red-legged frog (X)

Reptiles

Thamnophis sirtalis tetrataenia

San Francisco garter snake (E)

Birds

Brachyramphus marmoratus

Critical habitat, marbled murrelet (X)

marbled murrelet (T)

Charadrius alexandrinus nivosus

western snowy plover (T)

Pelecanus occidentalis californicus
California brown pelican (E)

Rallus longirostris obsoletus
California clapper rail (E)

Sternula antillarum (=Sterna, =albifrons) browni
California least tern (E)

Mammals

Reithrodontomys raviventris
salt marsh harvest mouse (E)

Plants

Acanthomintha duttonii
San Mateo thornmint (E)

Cirsium fontinale var. fontinale
fountain thistle (E)

Hesperolinon congestum
Marin dwarf-flax (=western flax) (T)

Pentachaeta bellidiflora
white-rayed pentachaeta (E)

Trifolium amoenum
showy Indian clover (E)

Quads Containing Listed, Proposed or Candidate Species:

PALO ALTO (428B)
WOODSIDE (429A)

County Lists

No county species lists requested.

Key:

(E) *Endangered* - Listed as being in danger of extinction.

(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.

(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.

(C) *Candidate* - Candidate to become a proposed species.

(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.

(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our Protocol and Recovery Permits pages.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.

  During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as

part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our Map Room page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6520.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be

February 18, 2014.

C-3
CNPS Species List

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE **RareFind**

Query Summary:
Quad IS (San Francisco South (3712264) OR Montara Mountain (3712254) OR Woodside (3712243) OR Palo Alto (3712242) OR San Mateo (3712253))

Print Close

CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Acanthomintha duttonii	San Mateo thorn-mint	Dicots	PDLAM01040	5	5	Endangered	Endangered	G1	S1	1B.1	SB_UCBBG-UC Berkeley Botanical Garden	Chaparral | Coastal scrub | Ultramafic | Valley & foothill grassland
Adela oplerella	Opler's longhorn moth	Insects	IILEE0G040	14	1	None	None	G2	S2	null	null	Ultramafic | Valley & foothill grassland
Allium peninsulare var. franciscanum	Franciscan onion	Monocots	PMLIL021R1	21	16	None	None	G5T1	S1	1B.2	null	Cismontane woodland | Ultramafic | Valley & foothill grassland
Ambystoma californiense	California tiger salamander	Amphibians	AAAAA01180	1122	5	Threatened	Threatened	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable	Cismontane woodland | Meadow & seep | Riparian woodland | Valley & foothill grassland | Vernal pool | Wetland
Amsinckia lunaris	bent-flowered fiddleneck	Dicots	PDBOR01070	64	3	None	None	G2?	S2?	1B.2	BLM_S-Sensitive	Cismontane woodland | Valley & foothill grassland
Antrozous pallidus	pallid bat	Mammals	AMACC10010	402	4	None	None	G5	S3	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive | WBWG_H-High Priority	Chaparral | Coastal scrub | Desert wash | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Riparian woodland | Sonoran desert scrub | Upper montane coniferous forest | Valley & foothill grassland
Arctostaphylos andersonii	Anderson's manzanita	Dicots	PDERI04030	58	1	None	None	G2	S2	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden	Broadleaved upland forest | Chaparral | North coast coniferous forest
Arctostaphylos franciscana	Franciscan manzanita	Dicots	PDERI040J3	4	1	Endangered	None	G1	S1	1B.1	SB_UCBBG-UC Berkeley Botanical Garden	Chaparral | Ultramafic
Arctostaphylos imbricata	San Bruno Mountain manzanita	Dicots	PDERI040L0	3	3	None	Endangered	G1	S1	1B.1	null	Chaparral | Coastal scrub
Arctostaphylos montana ssp. ravenii	Presidio manzanita	Dicots	PDERI040J2	7	1	Endangered	Endangered	G3T1	S1	1B.1	null	Chaparral | Coastal prairie | Coastal scrub | Ultramafic
Arctostaphylos montaraensis	Montara manzanita	Dicots	PDERI042W0	4	4	None	None	G1	S1	1B.2	null	Chaparral | Coastal scrub
Arctostaphylos pacifica	Pacific manzanita	Dicots	PDERI040Z0	1	1	None	Endangered	G1	S1	1B.2	null	Coastal scrub
Arctostaphylos regismontana	Kings Mountain manzanita	Dicots	PDERI041C0	17	15	None	None	G2	S2	1B.2	null	Broadleaved upland forest | Chaparral | North coast coniferous forest
Astragalus pycnostachyus var.	coastal marsh milk-vetch	Dicots	PDFAB0F7B2	25	2	None	None	G2T2	S2	1B.2	BLM_S-Sensitive | SB_SBBG-Santa Barbara Botanic Garden	Coastal dunes | Coastal scrub | Marsh & swamp | Wetland

pycnostachyus												
Astragalus tener var. tener	alkali milk-vetch	Dicots	PDFAB0F8R1	65	1	None	None	G2T2	S2	1B.2	null	Alkali playa | Valley & foothill grassland | Vernal pool | Wetland
Athene cunicularia	burrowing owl	Birds	ABNSB10010	1864	1	None	None	G4	S3	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Coastal prairie | Coastal scrub | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley & foothill grassland
Banksula incredula	incredible harvestman	Arachnids	ILARA14100	1	1	None	None	G1	S1	null	null	Chaparral | Talus slope
Caecidotea tomalensis	Tomales isopod	Crustaceans	ICMAL01220	6	2	None	None	G2	S2	null	null	Aquatic | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters
Calicina minor	Edgewood blind harvestman	Arachnids	ILARA13020	2	2	None	None	G1	S1	null	null	Ultramafic | Valley & foothill grassland
Callophrys mossii bayensis	San Bruno elfin butterfly	Insects	IILEPE2202	10	7	Endangered	None	G4T1	S1	null	XERCES_CI-Critically Imperiled	Valley & foothill grassland
Carex comosa	bristly sedge	Monocots	PMCYP032Y0	29	1	None	None	G5	S2	2B.1	null	Freshwater marsh | Marsh & swamp | Wetland
Centromadia parryi ssp. congdonii	Congdon's tarplant	Dicots	PDAST4R0P1	91	1	None	None	G3T2	S2	1B.1	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden	Valley & foothill grassland
Centromadia parryi ssp. parryi	pappose tarplant	Dicots	PDAST4R0P2	29	1	None	None	G3T1	S1	1B.2	BLM_S-Sensitive	Coastal prairie | Marsh & swamp | Meadow & seep | Valley & foothill grassland
Charadrius alexandrinus nivosus	western snowy plover	Birds	ABNNB03031	121	3	Threatened	None	G3T3	S2	null	CDFW_SSC-Species of Special Concern | NABCI_RWL-Red Watch List | USFWS_BCC-Birds of Conservation Concern	Great Basin standing waters | Sand shore | Wetland
Chloropyron maritimum ssp. palustre	Point Reyes salty bird's-beak	Dicots	PDSCR0J0C3	68	1	None	None	G4?T2	S2	1B.2	BLM_S-Sensitive	Marsh & swamp | Salt marsh | Wetland
Chorizanthe cuspidata var. cuspidata	San Francisco Bay spineflower	Dicots	PDPGN04081	17	8	None	None	G2T1	S1	1B.2	null	Coastal bluff scrub | Coastal dunes | Coastal prairie | Coastal scrub
Chorizanthe robusta var. robusta	robust spineflower	Dicots	PDPGN040Q2	22	2	Endangered	None	G2T1	S1	1B.1	BLM_S-Sensitive	Cismontane woodland | Coastal bluff scrub | Coastal dunes
Cicindela hirticollis gravida	sandy beach tiger beetle	Insects	IICOL02101	34	1	None	None	G5T2	S1	null	null	Coastal dunes
Cirsium andrewsii	Franciscan thistle	Dicots	PDAST2E050	27	3	None	None	G3	S3	1B.2	null	Broadleaved upland forest | Coastal bluff scrub | Coastal prairie | Coastal scrub | Ultramafic
Cirsium fontinale var. fontinale	Crystal Springs fountain thistle	Dicots	PDAST2E161	5	5	Endangered	Endangered	G2T1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Meadow & seep | Ultramafic | Valley & foothill grassland | Wetland
Cirsium occidentale var. compactum	compact cobwebby thistle	Dicots	PDAST2E1Z1	14	1	None	None	G3G4T1	S1	1B.2	null	Chaparral | Coastal dunes | Coastal prairie | Coastal scrub

Cirsium praeteriens	lost thistle	Dicots	PDAST2E2B0	1	1	None	None	GX	SX	1A	null	null
Collinsia multicolor	San Francisco collinsia	Dicots	PDSCR0H0B0	25	13	None	None	G2	S2	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden	Closed-cone coniferous forest | Coastal scrub
Corynorhinus townsendii	Townsend's big-eared bat	Mammals	AMACC08010	619	6	None	Candidate Threatened	G3G4	S2	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive | WBWG_H-High Priority	Broadleaved upland forest | Chaparral | Chenopod scrub | Great Basin grassland | Great Basin scrub | Joshua tree woodland | Lower montane coniferous forest | Meadow & seep | Mojavean desert scrub | Riparian forest | Riparian woodland | Sonoran desert scrub | Sonoran thorn woodland | Upper montane coniferous forest | Valley & foothill grassland
Danaus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	334	4	None	None	G4T2T3	S2S3	null	USFS_S-Sensitive	Closed-cone coniferous forest
Dipodomys venustus venustus	Santa Cruz kangaroo rat	Mammals	AMAFD03042	14	3	None	None	G4T1	S1	null	null	Chaparral
Dirca occidentalis	western leatherwood	Dicots	PDTHY03010	65	15	None	None	G2	S2	1B.2	null	Broadleaved upland forest | Chaparral | Cismontane woodland | Closed-cone coniferous forest | North coast coniferous forest | Riparian forest | Riparian woodland
Dufourea stagei	Stage's dufourine bee	Insects	IIHYM22010	1	1	None	None	G1G2	S1?	null	null	Coastal scrub
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1138	15	None	None	G3G4	S3	null	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	Aquatic | Artificial flowing waters | Klamath/North coast flowing waters | Klamath/North coast standing waters | Marsh & swamp | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters | South coast flowing waters | South coast standing waters | Wetland
Eriophyllum latilobum	San Mateo woolly sunflower	Dicots	PDAST3N060	4	2	Endangered	Endangered	G1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Cismontane woodland | Ultramafic
Eryngium aristulatum var. hooveri	Hoover's button-celery	Dicots	PDAPI0Z043	16	1	None	None	G5T1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Vernal pool | Wetland
Eucyclogobius newberryi	tidewater goby	Fish	AFCQN04010	117	1	Endangered	None	G3	S2S3	null	AFS_EN-Endangered | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable	Aquatic | Klamath/North coast flowing waters | Sacramento/San Joaquin flowing waters | South coast flowing waters
Euphydryas editha bayensis	Bay checkerspot butterfly	Insects	IILEPK4055	24	8	Threatened	None	G5T1	S1	null	XERCES_CI-Critically Imperiled	Coastal dunes | Ultramafic | Valley & foothill grassland
Falco columbarius	merlin	Birds	ABNKD06030	34	1	None	None	G5	S3S4	null	CDFW_WL-Watch List | IUCN_LC-Least Concern	Estuary | Great Basin grassland | Valley & foothill grassland
Falco peregrinus anatum	American peregrine falcon	Birds	ABNKD06071	38	1	Delisted	Delisted	G4T4	S3S4	null	CDF_S-Sensitive | CDFW_FP-Fully Protected | USFWS_BCC-Birds of Conservation Concern	null
Fritillaria biflora var. ineziana	Hillsborough chocolate lily	Monocots	PMLIL0V031	2	2	None	None	G1QT1Q	S1	1B.1	null	Cismontane woodland | Ultramafic | Valley & foothill grassland

Fritillaria liliacea	fragrant fritillary	Monocots	PMLIL0V0C0	77	10	None	None	G2	S2	1B.2	USFS_S-Sensitive	Coastal prairie | Coastal scrub | Ultramafic | Valley & foothill grassland
Geothlypis trichas sinuosa	saltmarsh common yellowthroat	Birds	ABPBX1201A	111	9	None	None	G5T2	S2	null	CDFW_SSC-Species of Special Concern | USFWS_BCC-Birds of Conservation Concern	Marsh & swamp
Gilia capitata ssp. chamissonis	blue coast gilia	Dicots	PDPLM040B3	29	3	None	None	G5T2	S2	1B.1	null	Coastal dunes | Coastal scrub
Grindelia hirsutula var. maritima	San Francisco gumplant	Dicots	PDAST470D3	15	9	None	None	G5T1Q	S1	3.2	null	Coastal bluff scrub | Coastal scrub | Ultramafic | Valley & foothill grassland
Helianthella castanea	Diablo helianthella	Dicots	PDAST4M020	96	2	None	None	G2	S2	1B.2	BLM_S-Sensitive	Broadleaved upland forest | Chaparral | Cismontane woodland | Coastal scrub | Valley & foothill grassland
Hemizonia congesta ssp. congesta	congested-headed hayfield tarplant	Dicots	PDAST4R065	33	2	None	None	G5T1T2	S1S2	1B.2	null	Valley & foothill grassland
Hesperevax sparsiflora var. brevifolia	short-leaved evax	Dicots	PDASTE5011	36	2	None	None	G4T3	S2	1B.2	BLM_S-Sensitive	Coastal bluff scrub | Coastal dunes | Coastal prairie
Hesperolinon congestum	Marin western flax	Dicots	PDLIN01060	26	11	Threatened	Threatened	G2	S2	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Ultramafic | Valley & foothill grassland
Heteranthera dubia	water star-grass	Monocots	PMPON03010	9	1	None	None	G5	S1	2B.2	null	Marsh & swamp
Horkelia cuneata var. sericea	Kellogg's horkelia	Dicots	PDROS0W043	38	3	None	None	G4T2	S2?	1B.1	USFS_S-Sensitive	Chaparral | Closed-cone coniferous forest | Coastal dunes | Coastal scrub
Horkelia marinensis	Point Reyes horkelia	Dicots	PDROS0W0B0	26	1	None	None	G2	S2	1B.2	null	Coastal dunes | Coastal prairie | Coastal scrub
Hydrochara rickseckeri	Ricksecker's water scavenger beetle	Insects	IICOL5V010	13	2	None	None	G2?	S2?	null	null	Aquatic | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters
Hydroporus leechi	Leech's skyline diving beetle	Insects	IICOL55040	13	1	None	None	G1?	S1?	null	null	Aquatic
Ischnura gemina	San Francisco forktail damselfly	Insects	IIODO72010	7	4	None	None	G2	S2	null	IUCN_VU-Vulnerable	null
Lasiurus cinereus	hoary bat	Mammals	AMACC05030	235	11	None	None	G5	S4	null	IUCN_LC-Least Concern | WBWG_M-Medium Priority	Broadleaved upland forest | Cismontane woodland | Lower montane coniferous forest | North coast coniferous forest
Laterallus jamaicensis coturniculus	California black rail	Birds	ABNME03041	241	3	None	Threatened	G3G4T1	S1	null	BLM_S-Sensitive | CDFW_FP-Fully Protected | IUCN_NT-Near Threatened | NABCI_RWL-Red Watch List | USFWS_BCC-Birds of Conservation Concern	Brackish marsh | Freshwater marsh | Marsh & swamp | Salt marsh | Wetland
Layia carnosa	beach layia	Dicots	PDAST5N010	23	1	Endangered	Endangered	G2	S2	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Coastal dunes | Coastal scrub

Leptosiphon croceus	coast yellow leptosiphon	Dicots	PDPLM09170	4	2	None	None	G1	S1	1B.1	SB_UCBBG-UC Berkeley Botanical Garden	Coastal bluff scrub | Coastal prairie
Leptosiphon rosaceus	rose leptosiphon	Dicots	PDPLM09180	31	4	None	None	G1	S1	1B.1	null	Coastal bluff scrub
Lessingia arachnoidea	Crystal Springs lessingia	Dicots	PDAST5S0C0	11	8	None	None	G1	S1	1B.2	SB_RSABG-Rancho Santa Ana Botanic Garden	Cismontane woodland | Coastal scrub | Ultramafic | Valley & foothill grassland
Lessingia germanorum	San Francisco lessingia	Dicots	PDAST5S010	5	2	Endangered	Endangered	G1	S1	1B.1	null	Coastal scrub
Lichnanthe ursina	bumblebee scarab beetle	Insects	IICOL67020	8	2	None	None	G2	S2	null	null	Coastal dunes
Limnanthes douglasii ssp. ornduffii	Ornduff's meadowfoam	Dicots	PDLIM02039	2	2	None	None	G4T1	S1	1B.1	null	Meadow & seep
Malacothamnus aboriginum	Indian Valley bush-mallow	Dicots	PDMAL0Q020	40	1	None	None	G2	S2	1B.2	BLM_S-Sensitive | SB_RSABG-Rancho Santa Ana Botanic Garden	Chaparral | Cismontane woodland
Malacothamnus arcuatus	arcuate bush-mallow	Dicots	PDMAL0Q0E0	25	10	None	None	G1Q	S1	1B.2	null	Chaparral | Cismontane woodland
Malacothamnus davidsonii	Davidson's bush-mallow	Dicots	PDMAL0Q040	56	3	None	None	G2	S2	1B.2	null	Chaparral | Cismontane woodland | Coastal scrub | Riparian woodland
Malacothamnus hallii	Hall's bush-mallow	Dicots	PDMAL0Q0F0	37	2	None	None	G2Q	S2	1B.2	BLM_S-Sensitive	Chaparral | Ultramafic
Melospiza melodia pusillula	Alameda song sparrow	Birds	ABPBXA301S	38	10	None	None	G5T2?	S2?	null	CDFW_SSC-Species of Special Concern | USFWS_BCC-Birds of Conservation Concern	Salt marsh
Microcina edgewoodensis	Edgewood Park micro-blind harvestman	Arachnids	ILARA47010	1	1	None	None	G1	S1	null	null	Ultramafic | Valley & foothill grassland
Monardella sinuata ssp. nigrescens	northern curly-leaved monardella	Dicots	PDLAM18162	25	1	None	None	G3T2	S2	1B.2	null	Chaparral | Coastal dunes | Coastal scrub | Lower montane coniferous forest
Monolopia gracilens	woodland woollythreads	Dicots	PDAST6G010	51	7	None	None	G2G3	S2S3	1B.2	null	Broadleaved upland forest | Chaparral | Cismontane woodland | North coast coniferous forest | Ultramafic | Valley & foothill grassland
Mylopharodon conocephalus	hardhead	Fish	AFCJB25010	32	1	None	None	G3	S3	null	CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	Klamath/North coast flowing waters | Sacramento/San Joaquin flowing waters
Myotis thysanodes	fringed myotis	Mammals	AMACC01090	83	1	None	None	G4	S3	null	BLM_S-Sensitive | IUCN_LC-Least Concern | USFS_S-Sensitive | WBWG_H-High Priority	null
Neotoma fuscipes annectens	San Francisco dusky-footed woodrat	Mammals	AMAFF08082	11	3	None	None	G5T2T3	S2S3	null	CDFW_SSC-Species of Special Concern	Chaparral | Redwood
Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	Marsh	CTT52110CA	53	5	None	None	G3	S3.2	null	null	Marsh & swamp | Wetland

Northern Maritime Chaparral	Northern Maritime Chaparral	Scrub	CTT37C10CA	17	2	None	None	G1	S1.2	null	null	Chaparral
Nyctinomops macrotis	big free-tailed bat	Mammals	AMACD04020	32	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | WBWG_MH-Medium-High Priority	null
Oncorhynchus mykiss irideus	steelhead - central California coast DPS	Fish	AFCHA0209G	38	4	Threatened	None	G5T2T3Q	S2S3	null	AFS_TH-Threatened	Aquatic | Sacramento/San Joaquin flowing waters
Pentachaeta bellidiflora	white-rayed pentachaeta	Dicots	PDAST6X030	14	4	Endangered	Endangered	G1	S1	1B.1	SB_UCBBG-UC Berkeley Botanical Garden	Ultramafic | Valley & foothill grassland
Phalacrocorax auritus	double-crested cormorant	Birds	ABNFD01020	37	3	None	None	G5	S4	null	CDFW_WL-Watch List | IUCN_LC-Least Concern	Riparian forest | Riparian scrub | Riparian woodland
Plagiobothrys chorisianus var. chorisianus	Choris' popcornflower	Dicots	PDBOR0V061	40	6	None	None	G3T2Q	S2	1B.2	null	Chaparral | Coastal prairie | Coastal scrub
Plebejus icarioides missionensis	Mission blue butterfly	Insects	IILEPG801A	14	13	Endangered	None	G5T1	S1	null	XERCES_CI-Critically Imperiled	Coastal prairie
Polemonium carneum	Oregon polemonium	Dicots	PDPLM0E050	16	1	None	None	G3G4	S2	2B.2	null	Coastal prairie | Coastal scrub | Lower montane coniferous forest
Potentilla hickmanii	Hickman's cinquefoil	Dicots	PDROS1B0U0	5	2	Endangered	Endangered	G1	S1	1B.1	null	Closed-cone coniferous forest | Coastal bluff scrub | Freshwater marsh | Marsh & swamp | Meadow & seep | Wetland
Rallus longirostris obsoletus	California clapper rail	Birds	ABNME05016	94	9	Endangered	Endangered	G5T1	S1	null	CDFW_FP-Fully Protected | NABCI_RWL-Red Watch List	Brackish marsh | Marsh & swamp | Salt marsh | Wetland
Rana draytonii	California red-legged frog	Amphibians	AAABH01022	1339	54	Threatened	None	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable	Aquatic | Artificial flowing waters | Artificial standing waters | Freshwater marsh | Marsh & swamp | Riparian forest | Riparian scrub | Riparian woodland | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters | South coast flowing waters | South coast standing waters | Wetland
Reithrodontomys raviventris	salt-marsh harvest mouse	Mammals	AMAFF02040	130	4	Endangered	Endangered	G1G2	S1S2	null	CDFW_FP-Fully Protected | IUCN_EN-Endangered	Marsh & swamp | Wetland
Riparia riparia	bank swallow	Birds	ABPAU08010	296	3	None	Threatened	G5	S2	null	BLM_S-Sensitive | IUCN_LC-Least Concern	Riparian scrub | Riparian woodland
Sanicula maritima	adobe sanicle	Dicots	PDAPI1Z0D0	16	1	None	Rare	G2	S2	1B.1	USFS_S-Sensitive	Chaparral | Coastal prairie | Meadow & seep | Ultramafic | Valley & foothill grassland
Serpentine Bunchgrass	Serpentine Bunchgrass	Herbaceous	CTT42130CA	22	5	None	None	G2	S2.2	null	null	Valley & foothill grassland
Silene verecunda ssp. verecunda	San Francisco campion	Dicots	PDCAR0U213	11	4	None	None	G5T2	S2	1B.2	null	Chaparral | Coastal bluff scrub | Coastal prairie | Coastal scrub | Ultramafic | Valley & foothill grassland
Sorex vagrans halicoetes	salt-marsh wandering shrew	Mammals	AMABA01071	12	1	None	None	G5T1	S1	null	CDFW_SSC-Species of Special Concern	Marsh & swamp | Wetland

Speyeria callippe callippe	callippe silverspot butterfly	Insects	IILEPJ6091	8	6	Endangered	None	G5T1	S1	null	XERCES_CI-Critically Imperiled	Coastal scrub
Speyeria zerene myrtleae	Myrtle's silverspot butterfly	Insects	IILEPJ608C	17	2	Endangered	None	G5T1	S1	null	XERCES_CI-Critically Imperiled	Coastal dunes
Spirinchus thaleichthys	longfin smelt	Fish	AFCHB03010	45	2	Candidate	Threatened	G5	S1	null	CDFW_SSC-Species of Special Concern	Aquatic | Estuary
Sternula antillarum browni	California least tern	Birds	ABNNM08103	67	1	Endangered	Endangered	G4T2T3Q	S2	null	CDFW_FP-Fully Protected | NABCI_RWL-Red Watch List	Alkali playa | Wetland
Stuckenia filiformis ssp. alpina	slender-leaved pondweed	Monocots	PMPOT03091	21	1	None	None	G5T5	S3	2B.2	null	Marsh & swamp | Wetland
Taxidea taxus	American badger	Mammals	AMAJF04010	476	3	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Alkali marsh | Alkali playa | Alpine | Alpine dwarf scrub | Bog & fen | Brackish marsh | Broadleaved upland forest | Chaparral | Chenopod scrub | Cismontane woodland | Closed-cone coniferous forest | Coastal bluff scrub | Coastal dunes | Coastal prairie | Coastal scrub | Desert dunes | Desert wash | Freshwater marsh | Great Basin grassland | Great Basin scrub | Interior dunes | Ione formation | Joshua tree woodland | Limestone | Lower montane coniferous forest | Marsh & swamp | Meadow & seep | Mojavean desert scrub | Montane dwarf scrub | North coast coniferous forest | Oldgrowth | Pavement plain | Redwood | Riparian forest | Riparian scrub | Riparian woodland | Salt marsh | Sonoran desert scrub | Sonoran thorn woodland | Ultramafic | Upper montane coniferous forest | Upper Sonoran scrub | Valley & foothill grassland
Thamnophis sirtalis tetrataenia	San Francisco garter snake	Reptiles	ARADB3613B	67	26	Endangered	Endangered	G5T2Q	S2	null	CDFW_FP-Fully Protected	Artificial standing waters | Marsh & swamp | Sacramento/San Joaquin standing waters | Wetland
Trachusa gummifera	San Francisco Bay Area leaf-cutter bee	Insects	IIHYM80010	2	1	None	None	G1	S1	null	null	null
Trifolium amoenum	showy rancheria clover	Dicots	PDFAB40040	26	2	Endangered	None	G1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden | SB_USDA-US Dept of Agriculture	Coastal bluff scrub | Ultramafic | Valley & foothill grassland
Trifolium hydrophilum	saline clover	Dicots	PDFAB400R5	49	1	None	None	G2	S2	1B.2	null	Marsh & swamp | Valley & foothill grassland | Vernal pool | Wetland
Triphysaria floribunda	San Francisco owl's-clover	Dicots	PDSCR2T010	41	7	None	None	G2	S2	1B.2	null	Coastal prairie | Coastal scrub | Ultramafic | Valley & foothill grassland
Triquetrella californica	coastal triquetrella	Bryophytes	NBMUS7S010	13	3	None	None	G1	S1	1B.2	USFS_S-Sensitive	Coastal bluff scrub | Coastal scrub | Valley & foothill grassland
Usnea longissima	Methuselah's beard lichen	Lichens	NLLEC5P420	206	1	None	None	G4	S4	4.2	BLM_S-Sensitive	Broadleaved upland forest | North coast coniferous forest | Oldgrowth | Redwood

Valley Needlegrass Grassland	Valley Needlegrass Grassland	Herbaceous	CTT42110CA	45	1	None	None	G3	S3.1	null	null	Valley & foothill grassland
Valley Oak Woodland	Valley Oak Woodland	Woodland	CTT71130CA	91	1	None	None	G3	S2.1	null	null	Cismontane woodland

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{QUADS_123} =~m/448C/ Search

Tip: +Lathyrus +"coastal dunes" returns only those Lathyrus in coastal dunes. Note the "+" and quotes.[all tips and help.][search history]

Your Quad Selection: Montara Mountain (448C) 3712254

Hits 1 to 35 of 35

Requests that specify topo quads will return only Lists 1-3.

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press | check all | check none

Selections will appear in a new window.

open	save	hits	scientific	common	family	CNPS
	☐	1	**Allium peninsulare var. franciscanum**	Franciscan onion	Alliaceae	List 1B.2
	☐	1	**Amsinckia lunaris**	bent-flowered fiddleneck	Boraginaceae	List 1B.2
	☐	1	**Arctostaphylos montaraensis**	Montara manzanita	Ericaceae	List 1B.2
	☐	1	**Arctostaphylos regismontana**	Kings Mountain manzanita	Ericaceae	List 1B.2
	☐	1	**Astragalus pycnostachyus var. pycnostachyus**	coastal marsh milk-vetch	Fabaceae	List 1B.2
	☐	1	**Centromadia parryi ssp. parryi**	pappose tarplant	Asteraceae	List 1B.2
	☐	1	**Chorizanthe cuspidata var. cuspidata**	San Francisco Bay spineflower	Polygonaceae	List 1B.2
	☐	1	**Cirsium andrewsii**	Franciscan thistle	Asteraceae	List 1B.2
	☐	1	**Collinsia multicolor**	San Francisco collinsia	Plantaginaceae	List 1B.2
	☐	1	**Dirca occidentalis**	western leatherwood	Thymelaeaceae	List 1B.2
	☐	1	**Eriophyllum latilobum**	San Mateo woolly sunflower	Asteraceae	List 1B.1
	☐	1	**Fritillaria biflora var. ineziana**	Hillsborough chocolate lily	Liliaceae	List 1B.1
	☐	1	**Fritillaria lanceolata var. tristulis**	Marin checker lily	Liliaceae	List 1B.1
	☐	1	**Fritillaria liliacea**	fragrant fritillary	Liliaceae	List 1B.2
	☐	1	**Grindelia hirsutula var. maritima**	San Francisco gumplant	Asteraceae	List 3.2
	☐	1	**Hesperevax sparsiflora var. brevifolia**	short-leaved evax	Asteraceae	List 1B.2

	☐	1	**Horkelia marinensis**	Point Reyes horkelia	Rosaceae	List 1B.2
	☐	1	**Leptosiphon croceus**	coast yellow leptosiphon	Polemoniaceae	List 1B.1
	☐	1	**Leptosiphon rosaceus**	rose leptosiphon	Polemoniaceae	List 1B.1
	☐	1	**Lessingia arachnoidea**	Crystal Springs lessingia	Asteraceae	List 1B.2
	☐	1	**Lessingia hololeuca**	woolly-headed lessingia	Asteraceae	List 3
	☐	1	**Limnanthes douglasii ssp. ornduffii**	Ornduff's meadowfoam	Limnanthaceae	List 1B.1
	☐	1	**Lupinus arboreus var. eximius**	San Mateo tree lupine	Fabaceae	List 3.2
	☐	1	**Malacothamnus aboriginum**	Indian Valley bush-mallow	Malvaceae	List 1B.2
	☐	1	**Malacothamnus arcuatus**	arcuate bush-mallow	Malvaceae	List 1B.2
	☐	1	**Malacothamnus davidsonii**	Davidson's bush-mallow	Malvaceae	List 1B.2
	☐	1	**Malacothamnus hallii**	Hall's bush-mallow	Malvaceae	List 1B.2
	☐	1	**Monolopia gracilens**	woodland woolythreads	Asteraceae	List 1B.2
	☐	1	**Pentachaeta bellidiflora**	white-rayed pentachaeta	Asteraceae	List 1B.1
	☐	1	**Plagiobothrys chorisianus var. chorisianus**	Choris' popcorn-flower	Boraginaceae	List 1B.2
	☐	1	**Polemonium carneum**	Oregon polemonium	Polemoniaceae	List 2B.2
	☐	1	**Potentilla hickmanii**	Hickman's cinquefoil	Rosaceae	List 1B.1
	☐	1	**Silene verecunda ssp. verecunda**	San Francisco campion	Caryophyllaceae	List 1B.2
	☐	1	**Triphysaria floribunda**	San Francisco owl's-clover	Orobanchaceae	List 1B.2
	☐	1	**Triquetrella californica**	coastal triquetrella	Pottiaceae	List 1B.2

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{QUADS_123} =~m/428B/ Search

Tip: Terms prefixed by "+" are required, and by "-" excluded.[all tips and help.][search history]

Your Quad Selection: Palo Alto (428B) 3712242

Hits 1 to 20 of 20

Requests that specify topo quads will return only Lists 1-3.

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press check all check none

Selections will appear in a new window.

open	save	hits	scientific	common	family	CNPS
		1	**Acanthomintha duttonii**	San Mateo thorn-mint	Lamiaceae	List 1B.1
		1	**Allium peninsulare var. franciscanum**	Franciscan onion	Alliaceae	List 1B.2
		1	**Arctostaphylos regismontana**	Kings Mountain manzanita	Ericaceae	List 1B.2
		1	**Centromadia parryi ssp. congdonii**	Congdon's tarplant	Asteraceae	List 1B.1
		1	**Cirsium fontinale var. fontinale**	Crystal Springs fountain thistle	Asteraceae	List 1B.1
		1	**Cirsium praeteriens**	lost thistle	Asteraceae	List 1A
		1	**Collinsia multicolor**	San Francisco collinsia	Plantaginaceae	List 1B.2
		1	**Dirca occidentalis**	western leatherwood	Thymelaeaceae	List 1B.2
		1	**Eryngium aristulatum var. hooveri**	Hoover's button-celery	Apiaceae	List 1B.1
		1	**Fritillaria liliacea**	fragrant fritillary	Liliaceae	List 1B.2
		1	**Hesperolinon congestum**	Marin western flax	Linaceae	List 1B.1
		1	**Lessingia hololeuca**	woolly-headed lessingia	Asteraceae	List 3
		1	**Malacothamnus arcuatus**	arcuate bush-mallow	Malvaceae	List 1B.2
		1	**Malacothamnus davidsonii**	Davidson's bush-mallow	Malvaceae	List 1B.2
		1	**Micropus amphibolus**	Mt. Diablo cottonweed	Asteraceae	List 3.2
		1	**Monolopia gracilens**	woodland woolythreads	Asteraceae	List 1B.2

	☐	1	**Plagiobothrys chorisianus var. chorisianus**	Choris' popcorn-flower	Boraginaceae	List 1B.2
	☐	1	**Stuckenia filiformis ssp. alpina**	slender-leaved pondweed	Potamogetonaceae	List 2B.2
	☐	1	**Trifolium amoenum**	two-fork clover	Fabaceae	List 1B.1
	☐	1	**Tropidocarpum capparideum**	caper-fruited tropidocarpum	Brassicaceae	List 1B.1

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ADD checked items to Plant Press | check all | check none

Selections will appear in a new window.

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{QUADS_123} =~m/448D/ Search

Tip: `+Lathyrus +"coastal dunes"` returns only those Lathyrus in coastal dunes. Note the "+" and quotes.[all tips and help.][search history]

Your Quad Selection: San Mateo (448D) 3712253

Hits 1 to 26 of 26

Requests that specify topo quads will return only Lists 1-3.

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press | check all | check none

Selections will appear in a new window.

open	save	hits	scientific	common	family	CNPS
	☐	1	**Acanthomintha duttonii**	San Mateo thorn-mint	Lamiaceae	List 1B.1
	☐	1	**Allium peninsulare var. franciscanum**	Franciscan onion	Alliaceae	List 1B.2
	☐	1	**Amsinckia lunaris**	bent-flowered fiddleneck	Boraginaceae	List 1B.2
	☐	1	**Arctostaphylos montaraensis**	Montara manzanita	Ericaceae	List 1B.2
	☐	1	**Astragalus pycnostachyus var. pycnostachyus**	coastal marsh milk-vetch	Fabaceae	List 1B.2
	☐	1	**Chloropyron maritimum ssp. palustre**	Point Reyes bird's-beak	Orobanchaceae	List 1B.2
	☐	1	**Chorizanthe cuspidata var. cuspidata**	San Francisco Bay spineflower	Polygonaceae	List 1B.2
	☐	1	**Cirsium fontinale var. fontinale**	Crystal Springs fountain thistle	Asteraceae	List 1B.1
	☐	1	**Collinsia multicolor**	San Francisco collinsia	Plantaginaceae	List 1B.2
	☐	1	**Dirca occidentalis**	western leatherwood	Thymelaeaceae	List 1B.2
	☐	1	**Eriophyllum latilobum**	San Mateo woolly sunflower	Asteraceae	List 1B.1
	☐	1	**Fritillaria biflora var. ineziana**	Hillsborough chocolate lily	Liliaceae	List 1B.1
	☐	1	**Fritillaria liliacea**	fragrant fritillary	Liliaceae	List 1B.2
	☐	1	**Hesperevax sparsiflora var. brevifolia**	short-leaved evax	Asteraceae	List 1B.2
	☐	1	**Hesperolinon congestum**	Marin western flax	Linaceae	List 1B.1
	☐	1	**Lessingia arachnoidea**	Crystal Springs lessingia	Asteraceae	List 1B.2

	☐	1	**Lilium maritimum**	coast lily	Liliaceae	List 1B.1
	☐	1	**Lupinus arboreus var. eximius**	San Mateo tree lupine	Fabaceae	List 3.2
	☐	1	**Malacothamnus arcuatus**	arcuate bush-mallow	Malvaceae	List 1B.2
	☐	1	**Malacothamnus davidsonii**	Davidson's bush-mallow	Malvaceae	List 1B.2
	☐	1	**Malacothamnus hallii**	Hall's bush-mallow	Malvaceae	List 1B.2
	☐	1	**Monolopia gracilens**	woodland woolythreads	Asteraceae	List 1B.2
	☐	1	**Pentachaeta bellidiflora**	white-rayed pentachaeta	Asteraceae	List 1B.1
	☐	1	**Polemonium carneum**	Oregon polemonium	Polemoniaceae	List 2B.2
	☐	1	**Trifolium hydrophilum**	saline clover	Fabaceae	List 1B.2
	☐	1	**Triphysaria floribunda**	San Francisco owl's-clover	Orobanchaceae	List 1B.2

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press | check all | check none

Selections will appear in a new window.

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{QUADS_123} =~m/448B/ Search

Tip: `Lathyrus Astragalus` returns species from both genera.[all tips and help.][search history]

Your Quad Selection: San Francisco South (448B) 3712264

Hits 1 to 31 of 31

Requests that specify topo quads will return only Lists 1-3.

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press | check all | check none

Selections will appear in a new window.

open	save	hits	scientific	common	family	CNPS
	☐	1	**Amsinckia lunaris**	bent-flowered fiddleneck	Boraginaceae	List 1B.2
	☐	1	**Arctostaphylos franciscana**	Franciscan manzanita	Ericaceae	List 1B.1
	☐	1	**Arctostaphylos imbricata**	San Bruno Mountain manzanita	Ericaceae	List 1B.1
	☐	1	**Arctostaphylos montana ssp. ravenii**	Presidio manzanita	Ericaceae	List 1B.1
	☐	1	**Arctostaphylos montaraensis**	Montara manzanita	Ericaceae	List 1B.2
	☐	1	**Arctostaphylos pacifica**	Pacific manzanita	Ericaceae	List 1B.2
	☐	1	**Astragalus tener var. tener**	alkali milk-vetch	Fabaceae	List 1B.2
	☐	1	**Centromadia parryi ssp. parryi**	pappose tarplant	Asteraceae	List 1B.2
	☐	1	**Chorizanthe cuspidata var. cuspidata**	San Francisco Bay spineflower	Polygonaceae	List 1B.2
	☐	1	**Chorizanthe robusta var. robusta**	robust spineflower	Polygonaceae	List 1B.1
	☐	1	**Cirsium andrewsii**	Franciscan thistle	Asteraceae	List 1B.2
	☐	1	**Cirsium occidentale var. compactum**	compact cobwebby thistle	Asteraceae	List 1B.2
	☐	1	**Collinsia multicolor**	San Francisco collinsia	Plantaginaceae	List 1B.2
	☐	1	**Equisetum palustre**	marsh horsetail	Equisetaceae	List 3
	☐	1	**Fritillaria liliacea**	fragrant fritillary	Liliaceae	List 1B.2
	☐	1	**Gilia capitata ssp. chamissonis**	blue coast gilia	Polemoniaceae	List 1B.1

	☐	1	**Grindelia hirsutula var. maritima**	San Francisco gumplant	Asteraceae	List 3.2
	☐	1	**Helianthella castanea**	Diablo helianthella	Asteraceae	List 1B.2
	☐	1	**Hemizonia congesta ssp. congesta**	congested-headed hayfield tarplant	Asteraceae	List 1B.2
	☐	1	**Hesperevax sparsiflora var. brevifolia**	short-leaved evax	Asteraceae	List 1B.2
	☐	1	**Heteranthera dubia**	water star-grass	Pontederiaceae	List 2B.2
	☐	1	**Horkelia cuneata var. sericea**	Kellogg's horkelia	Rosaceae	List 1B.1
	☐	1	**Lessingia germanorum**	San Francisco lessingia	Asteraceae	List 1B.1
	☐	1	**Malacothamnus arcuatus**	arcuate bush-mallow	Malvaceae	List 1B.2
	☐	1	**Monardella sinuata ssp. nigrescens**	northern curly-leaved monardella	Lamiaceae	List 1B.2
	☐	1	**Pentachaeta bellidiflora**	white-rayed pentachaeta	Asteraceae	List 1B.1
	☐	1	**Plagiobothrys chorisianus var. chorisianus**	Choris' popcorn-flower	Boraginaceae	List 1B.2
	☐	1	**Silene verecunda ssp. verecunda**	San Francisco campion	Caryophyllaceae	List 1B.2
	☐	1	**Trifolium amoenum**	two-fork clover	Fabaceae	List 1B.1
	☐	1	**Triphysaria floribunda**	San Francisco owl's-clover	Orobanchaceae	List 1B.2
	☐	1	**Triquetrella californica**	coastal triquetrella	Pottiaceae	List 1B.2

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press | check all | check none

Selections will appear in a new window.

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{QUADS_123} =~m/429A/ Search

Tip: `CNPS_LIST:"List 3"` (note the field name) returns only taxa on List 3. `"List 3"` by itself, matches the phrase wherever found. Browse the list of **field names**.[all tips and help.][search history]

Your Quad Selection: Woodside (429A) 3712243

Hits 1 to 20 of 20

Requests that specify topo quads will return only Lists 1-3.

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press check all check none

Selections will appear in a new window.

open	save	hits	scientific	common	family	CNPS
	☐	1	**Acanthomintha duttonii**	San Mateo thorn-mint	Lamiaceae	List 1B.1
	☐	1	**Allium peninsulare var. franciscanum**	Franciscan onion	Alliaceae	List 1B.2
	☐	1	**Arctostaphylos andersonii**	Anderson's manzanita	Ericaceae	List 1B.2
	☐	1	**Arctostaphylos regismontana**	Kings Mountain manzanita	Ericaceae	List 1B.2
	☐	1	**Astragalus pycnostachyus var. pycnostachyus**	coastal marsh milk-vetch	Fabaceae	List 1B.2
	☐	1	**Cirsium fontinale var. fontinale**	Crystal Springs fountain thistle	Asteraceae	List 1B.1
	☐	1	**Collinsia multicolor**	San Francisco collinsia	Plantaginaceae	List 1B.2
	☐	1	**Dirca occidentalis**	western leatherwood	Thymelaeaceae	List 1B.2
	☐	1	**Fritillaria liliacea**	fragrant fritillary	Liliaceae	List 1B.2
	☐	1	**Hesperolinon congestum**	Marin western flax	Linaceae	List 1B.1
	☐	1	**Lessingia arachnoidea**	Crystal Springs lessingia	Asteraceae	List 1B.2
	☐	1	**Lessingia hololeuca**	woolly-headed lessingia	Asteraceae	List 3
	☐	1	**Lupinus arboreus var. eximius**	San Mateo tree lupine	Fabaceae	List 3.2
	☐	1	**Malacothamnus arcuatus**	arcuate bush-mallow	Malvaceae	List 1B.2
	☐	1	**Malacothamnus davidsonii**	Davidson's bush-mallow	Malvaceae	List 1B.2
	☐	1	**Monolopia gracilens**	woodland woolythreads	Asteraceae	List 1B.2

	☐	1	**Pedicularis dudleyi**	Dudley's lousewort	Orobanchaceae	List 1B.2
	☐	1	**Pentachaeta bellidiflora**	white-rayed pentachaeta	Asteraceae	List 1B.1
	☐	1	**Plagiobothrys chorisianus var. chorisianus**	Choris' popcorn-flower	Boraginaceae	List 1B.2
	☐	1	**Silene verecunda ssp. verecunda**	San Francisco campion	Caryophyllaceae	List 1B.2

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press | check all | check none

Selections will appear in a new window.

No more hits.

Appendix D

Cultural Resources Background Information and Documentation

Appendix D-1: Regional Background Conditions

Appendix D-2: CSM Photographic Record

Appendix D-3: Previous DPR Form

Appendix D-4: Native American Correspondence

Regional Background Conditions

This appendix summarizes prehistoric, ethnographic, geoarchaeological, and historical contexts of the Project site and surrounding lands. This summary of the regional conditions is based on previous reports and other secondary sources.

Prehistoric Setting

This appendix summarizes prehistoric, ethnographic, geoarchaeological, and historical contexts of the Project site and surrounding lands. This summary of the regional conditions is based on previous reports and other secondary sources.

The entire Bay Area was a region of intense human occupation long before the European explorers settled in the region in the eighteenth century. In the early twentieth century, the prehistory of the region was virtually unknown, aside from a small amount of ethnographic information (Kroeber 1925) and the discovery of a few prehistoric sites at the south end of the San Francisco Bay (Nelson 1909). Because of the intense and rapid urban development in the Bay Area during the late nineteenth and early twentieth centuries, many archaeological resources were damaged or destroyed before scientific inquiry could be conducted. Many of the archaeological excavations in this region have been salvage efforts, often conducted without the time or resources necessary to perform adequate data recovery and professional reporting. However, over the past several years, the understanding of this region's prehistory has changed, partly because of intensive fieldwork resulting from compliance with environmental laws.

Milliken et al. (2007) present a series of culture changes in the Bay Area. The period of occupation during the cal 11,500 to 8000 B.C., when Clovis big-game hunters, then initial Holocene gatherers, presumably lived in the area, lacks evidence, because such evidence has likely been washed away by stream action, buried under more recent alluvium, or submerged on the continental shelf (Rosenthal and Meyer 2004:1). There is evidence, however, that an in-place forager economic pattern began around cal 8000 B.C., and was followed by five cycles of change that began at approximately cal 3500 B.C.

Early Holocene (Lower Archaic), cal 8000–3500 B.C.

Between cal 8000 and 3500 B.C., the Bay Area appears to have been occupied by a widespread but sparse population of hunter-gatherers. The millingslab and handstone, as well as a variety of large, wide-stemmed and leaf-shaped projectile points, all emerged during this period (Milliken et al. 2007:114). Local Franciscan chert dominated the Early Holocene Santa Clara Valley components (Hylkema 2002:235). Radiocarbon determinations from a feature and an *Olivella biplicata* spire-lopped bead indicate the presence of cultural materials dating as early as 7500 cal B.C. (Fitzgerald and Porcasi 2003; Fitzgerald et al. 2005).

Early Period (Middle Archaic), cal 3500–500 B.C.

Several technological and social developments characterize this period in the Bay Area. Rectangular *Haliotis* and *Olivella* shell beads, the markers of the Early Period bead horizon, continued in use until

at least 2,800 years ago (Ingram 1998; Wallace and Lathrop 1975:19). The mortar and pestle were first documented in the Bay Area shortly after 4000 B.C., and by 1500 cal B.C., cobble mortars and pestles, and not millingslabs and handstones, were used at sites throughout the Bay Area, including ALA-483 (Livermore Valley) (Wiberg 1996:373).

Lower Middle Period (Initial Upper Archaic), cal 500 B.C.–cal A.D. 430

Although it is unclear when the "major disruption in symbolic integration systems" originated, it is clear in the record around 500 B.C. and may have begun several hundred years earlier (Milliken et al. 2007:115). Rectangular shell beads disappeared from the Bay Area, Central Valley, and portions of Southern California during this time; and a whole new suite of decorative and presumed religious objects appeared during the Early Period-Middle Period Transition (EMT) (Elsasser 1978), which corresponds to the beginning of this period. Net sinkers, a typical early period marker throughout the bay, disappeared from most sites, with the exception of SFR-112, where they continued in use well into the Middle Period (Pastron and Walsh 1988:90).

Upper Middle Period (Late Upper Archaic), A.D. cal 430–1050

Around 430 A.D., the *Olivella* saucer bead trade network collapsed, and over half of known bead horizon M1 sites were abandoned, while the remaining sites saw a large increase in sea otter bones. Additionally, the Meganos extended burial mortuary pattern began to spread in the interior East Bay (Bennyhoff 1994a, 1994b), and the Meganos mortuary complex spread from the interior into the Santa Clara Valley at Wade Ranch (SCL-302) (Milliken et al. 2007:116).

Initial Late Period (Lower Emergent), A.D. CAL 1050–1550

Fredrickson (1973) coined the term "Emergent" to describe this period, in recognition of the appearance of a new level of sedentism, status ascription, and ceremonial integration in lowland central California. Obsidian production and mortuary practices showed evidence of increased social stratification after 1250 A.D., and while the quantity of burial items decreased, the quality of these items, particularly in high-status burials and cremations, increased (Fredrickson 1994:62). This development may have reflected a new regional ceremonial system that was the precursor of the ethnographic Kuksu cult, a ceremonial system that unified the many language groups around the Bay during this period (Fredrickson 1974:66; Bennyhoff 1994b). In the San Jose and Point Año Nuevo Localities, local Franciscan chert remained the primary production material for debitage and casual tools, and Napa Valley obsidian remained the primary production material for projectile points (Bellifemine 1997:124-136; Clark and Reynolds 2003:8; Hylkema 2002:250).

Terminal Late Period: Protohistoric Ambiguities

Changes in artifact types and mortuary objects characterized A.D. cal 1500–1650. The signature *Olivella* sequin and cup beads of the central California L1 Bead Horizon abruptly disappeared, and clamshell disk beads, markers of the L2 Bead Horizon, spread across the North Bay (Milliken et al. 2007:117). Simple corner-notched points began to appear in the Central Bay, while Desert side-notched points spread into the South Bay from the Central Coast (see Hylkema 2002; Jackson 1986, 1989; Jurmain 1983).

Another upward cycle of regional integration was commencing when it was interrupted by Spanish settlement in the Bay Area beginning in 1776. Such regional integration was a continuing

characteristic of the Augustine Pattern, most likely brought to the Bay Area by Patwin speakers from Oregon, who introduced new tools (such as the bow) and traits (such as pre-internment grave pit burning) into central California. Perhaps the Augustine Pattern, with its inferred shared regional religious and ceremonial organization, was developed as a means of overcoming insularity, not in the core area of one language group but in an area where many neighboring language groups were in contact (Milliken et al. 2007:118).

Ethnographic Setting

At the time of European contact, the Bay Area was occupied by a group of Native Americans whom ethnographers refer to as the Ohlone or Costanoan. The Ohlone are a linguistically defined group composed of several autonomous tribelets that spoke eight different but related languages. The Ohlone languages, together with Miwok, compose the Utian language family of the Penutian stock. The territory of the Ohlone people extended along the coast from the Golden Gate in the north to just below Carmel to the south, and as far as 60 miles inland. The territory encompassed a lengthy coastline, as well as several inland valleys (Levy 1978:485–486).

All three campuses lie within the tribal group known as the Pruristac; this name also refers to their village in San Pedro Valley on the Pacific Coast just south of San Francisco. Numerous Mission San Francisco baptismal entries name "Pruristac, alias San Pedro." Pruristac and Timigtac, just a few miles north on the coast at the present town of Rockaway Beach, were inhabited by small groups of closely interrelated families. Like the people of nearby Urebure to the east, they seem to have been independent bands, rather than members of a large, multi-village tribe. The Mission San Francisco outstation of San Pedro was constructed at Pruristac during the mid-1780s (Milliken 1995:251).

The Ohlone were hunter-gatherers and relied heavily on acorns and seafood. They also exploited a wide range of other foods, including various seeds (the growth of which was promoted by controlled burning), buckeye, berries, roots, land and sea mammals, waterfowl, reptiles, and insects. The Ohlone used tule balsas for watercraft, and bow and arrow, cordage, bone tools, and twined basketry to procure and process their foodstuffs (Levy 1978:491–493).

Prior to contact, the Ohlone were politically organized by tribelet, with each having a designated territory. A tribelet consisted of one or more villages and camps within a territory designated by physiographic features. This type of organization was prevalent in pre-contact California (Kroeber 1925). Duties of the chief included providing for visitors and directing ceremonial activities. The chief also served as the leader of a council of elders that functioned primarily in an advisory capacity to the community (Harrington 1933:3).

Seven Spanish missions were founded in Ohlone territory between 1776 and 1797. While living within the mission system, the Ohlone commingled with other groups, including the Esselen, Yokuts, Miwok, and Patwin. Mission life was devastating to the Ohlone population (Milliken 1995). It has been estimated that in 1776, when the first mission was established in Ohlone territory, the Ohlone population numbered around 10,000. By 1832, the Ohlones numbered less than 2,000 as a result of introduced disease, harsh living conditions, and reduced birth rates (Cook 1943a, 1943b).

Under the Mexican government, secularization of the mission lands began in earnest in 1834. The indigenous population scattered away from the mission centers, and the few that were given rancherias from the mission lands were ill-equipped to maintain or work their land. Most of the former mission land was divided among loyal Mexican subjects, and the Ohlone who chose to

remain in their ancestral territory usually became squatters. Some were given jobs as manual laborers or domestic servants on Mexican ranchos or, later, American cattle ranches. During the next few decades, there was a partial return to aboriginal religious practices, particularly shamanism, and some return to food collection as a means of subsistence. Consequently, several multiethnic Indian communities (consisting of individuals of Chochenyo, Plains Miwok, Northern Valley Yokuts, Patwin, and/or Coast Miwok descent) were established in the mid-nineteenth century within Ohlone territory (Levy 1978:487).

Ohlone recognition and assertion began to move to the forefront during the early twentieth century, enforced by two legal suits brought against the U.S. government by Indians of California (1928–1964) for reparation due them for the loss of traditional lands. A review of what was known about Indians for the entire state of California commenced, and the political organizing necessary to mount this action on the part of Indians led to the formation of political advocacy groups throughout the state. The Ohlone participated, and a new roll of descendants was established, bringing a new focus on the community and reevaluation of rights due its members (Bean 1994:xxiv). Although they have yet to receive formal recognition from the federal government, the Ohlone are becoming increasingly organized as a political unit, and have an active interest in preserving their ancestral heritage and advocating for Native American issues.

Historic Setting

Early History: Spanish and Mexican Era

Explorer Sebastian Vizcaino visited the San Mateo County region as early as 1602 when he sailed along the California coast in search of a suitable harbor for Spain. In 1769, Gaspar de Portola and his party traveled through the area in the vicinity of present-day Half Moon Bay, Woodside, and Monterey Bay. Other visitors included Fernando de Rivera y Moncada and Juan Bautista de Anza, who explored portions of the county in 1774 and in 1776, respectively (Kyle 1990).

By the early 1800s, two Mexican ranchos, including Rancho San Mateo and Rancho de las Pulgas, encompassed the present-day city of San Mateo, and Rancho Buri Buri the present day cities of San Bruno and Millbrae. After the rancho period ended in the mid-1800s, put largely in motion by the discovery of gold and the subsequent gold rush of 1849, they were subdivided into smaller parcels and settled. In 1864, the San Francisco & San Jose Rail Road Company (later Southern Pacific Railroad Company) laid an alignment that linked San Francisco and San Jose, stopping in the new township of San Mateo. The railroad also opened San Mateo County to the residents of San Francisco who wished to establish summer residences in the country. These estates were largely self-sufficient, working farms, and some had their own services, such as general stores, blacksmith shops, livery stables, saloons, and hotels. The San Mateo region gradually developed over the years and eventually featured several businesses, churches, and schools. The City of San Mateo, in which the CSM campus is located, incorporated in 1894 (Cerny 2007; Shoecraft 1989). Cañada College campus is located mostly in the Town of Woodside which was incorporated in 1956, but settlement and growth of the town dates back to the 1880s. A small northeastern portion of Cañada College is in the City of Redwood City which was incorporated in 1897 (Cerny 2007).

The City of San Bruno, in which the Skyline College campus is located, was incorporated in 1914. During much of the late ninetieth century, San Bruno consisted of a few farms and roadhouses. The city began to develop in earnest after the 1906 earthquake and fire that destroyed much of San Francisco. San Bruno began to grow as a suburban community. In 1927, Mills field was dedicated as

an airport near the site now occupied by San Francisco International Airport. Although owned and operated by the City and County of San Francisco, the airport is an influential part of San Bruno's economy (Cerny 2007; Shoecraft 1989).

All three campuses are located within the County of San Mateo, which was organized in 1856 from portions of San Francisco County. The City of Belmont served as the original County seat, but in 1856 the seat moved to the City of Redwood City (Kyle 1990).

CSM Photographic Record

College of San Mateo. Photos taken by Aisha Fike, ICF International, May 11, 2015.



Photograph 1. The Music, Theater and Art buildings (2-4) connected by a colonnade with a central courtyard and fronted by pool.



Photograph 2. The Theater building (3) with central stepped courtyard.



Photograph 3. Entry space of Theater building. Note the typical hyperbolic paraboloid roof, original interior with diamond shaped drop lights and curved wood screen.



Photograph 4. Art building (4). View northwest.



Photograph 5. Library building. View east at main entrance.



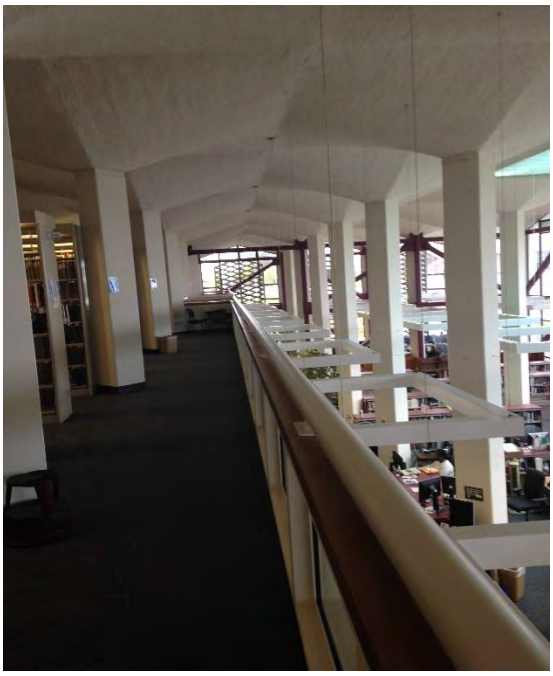
Photograph 5. Library building. View north.



Photograph 7. Library building. View north at main entrance and below grade level.



Photograph 8. Library interior. View north looking at bay.



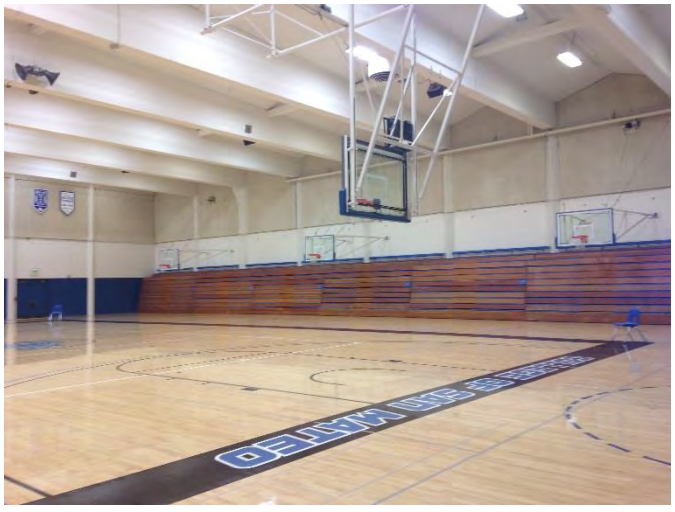
Photograph 9. Library interior. View of two-story colonnades.



Photograph 10. Building 1. View west looking at main elevation and entrance.



Photograph 11. Gymnasium. View east looking at main elevation and entrance.



Photograph 12. Gym interior showing roof beams and folded plate design.



Photograph 13. View west showing Fine Arts Complex and Administration building.



Photograph 14. Building 19, view north of one-story elevation. Façade similar to building 19.



Photograph 15. Building 14, view west showing narrow elevation. Façade similar to building 16 and 18.



Photograph 16. View northwest at colonnade and building 18. Building 17 is recessed behind the colonnade.



Photograph 17. Building 14 view north. Example glass curtain wall facade.



Photograph 18. View looking west from building 10 showing buildings 14-16 and the newly redesigned courtyard.



Photograph 19. Art Building and original pool, circa 1964.



Photograph 20. The Theater building central courtyard with the original circular play arena, circa 1960s.

College of San Mateo. Historic photographs courtesy of the College of San Mateo Library Archives, Historical Photographic Collection. Available online at <http://smccd.edu/photoarchives>, accessed May 18, 2015.



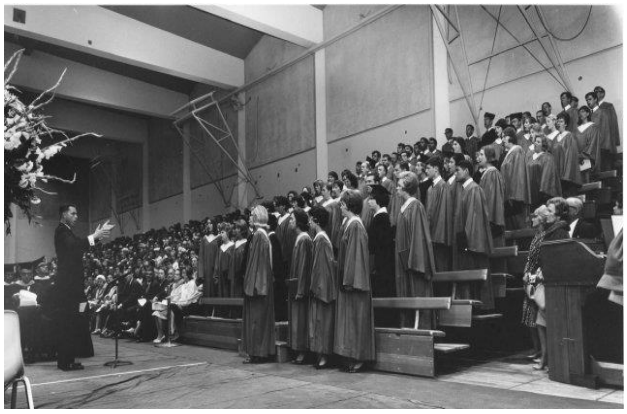
Photograph 21. Library, view east, circa 1965.



Photograph 22. Library interior, view east towards the bay, circa 1965.



Photograph 23. CSM Campus, aerial view, 1964.



Photograph 24. Gym interior, commencement,

1965.



Photograph 25. Admin Building 1, view west, showing original concrete colonnade attached to building 1 and 5. 1965. Circa 1965.



Photograph 26. Courtyard showing library to the right and building 14 to the left, circa 1960s.

Previous DPR Form

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-41-002284
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code ____ Reviewer _____ Date _____

*Resource Name or #: College of San Mateo Fine and Performing Arts Building

P1. **Other Identifier:** College Heights Campus; Building No. 3
*P2. **Location:** ☐ Not for Publication ■ Unrestricted *a. **County:** San Mateo
*b. **USGS Quad:** San Mateo, CA 7.5' 1995 MDM
c. **Address:** 1700 West Hillsdale Drive **City:** San Mateo **Zip:** 94402
d. **UTM:** **Zone:**
*e. **Other Locational Data:** (e.g., parcel #, directions to resource, elevation, etc., as appropriate): The Fine and Performing Arts Building is located at the far northeast corner of the hilltop campus. APN 038-281-360.

*P3a. **Description:**

The property consists of a two to three-story reinforced concrete fine arts complex designed in the Formal Modern Classical style of architecture, characterized by a central plaza surrounded on three sides by two-story classrooms and a two-story arcade formed by a series of square concrete columns that terminate on a flat roof that connects the two opposing buildings. In the front, or to the east of the arcaded entrance to the plaza, is a trapezoidal fountain and pool set in a low concrete foundation. On opposite sides of the poured concrete plaza surrounding the fountain are a series of free-standing arcaded pergolas of concrete that form the central space. The inside of the plaza, which stands two-stories tall, features the main entrance to the theater facing east and the Music and Art wings. All three elevations feature banks of pointed arched windows running from the ground floor to the ceiling, all of which provides extraordinary views outward towards the interior plaza. The building itself is sited atop a flat terrace with sloping sides to the north and south respectively. The east arcaded entrance to the plaza is flanked by smooth painted concrete walls surfaces lacking fenestration, but embellished by an exaggerated flat roof that extends well beyond the wall plane of the building. The side elevations of the building feature two rows of anodized aluminum windows with four windows per bank, having two lights per window with the top windows forming a v-shaped arch created by an elliptical roof that wraps around the building. Between the banks of windows are slightly textured concrete panels. The building returns inward on both its north and south elevations, featuring plain concrete panel walls that extend to the west forming the theater with the one-story sculpture and ceramics building on the far northwest end of the theater. An abstract stairway leads to the upper floors of the theater building along its northwest elevation, featuring two trapezoidal vertical slabs of concrete that mimic the fountain on the south of the building complex. Paneled concrete walls and banks of anodized aluminum windows finish the western end of the building, along with a tower extending upward for nearly four-stories. The far west elevation generally lacks fenestration, characterized by flat paneled concrete walls and the same roof profile. Unlike the east elevation, which is dominated by a hardscape, benches, and a fountain, the north and south elevations are surrounded by lawns.

*P3b. **Resource Attributes:** HP15 - Educational Building
*P4. **Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District

P5. **Photograph or Drawing** (Photograph required for buildings, structures, and objects.)



P5b. **Description of Photo:** View looking north from the center of the plaza towards the east elevation of the Fine and Performing Arts Building.
*P6. **Date Constructed/Age and Sources:** ■ Historic
1962-1963.
*P7. **Owner and Address:** San Mateo County Community College District, 3401 CSM Drive, San Mateo, CA 94402.
*P8. **Recorded by:** Dana E. Supernowicz, Historic Resource Associates, 2001 Sheffield Drive, El Dorado Hills, CA 95762.
*P9. **Date Recorded:** June 2011
*P10. **Type of Survey:** ■ Architectural
Describe: Architectural Recordation and Evaluation per Section 106 of NHPA.
*P11. **Report Citation:** Cultural Resources Study of the College of San Mateo Project, AT&T Site No. CNU1796, 1700 West Hillsdale Drive, San Mateo, San Mateo County, California 94402. Prepared for EarthTouch, Inc., 3135 North Fairfield Road, Layton, Utah 84041. Prepared by Historic Resource Associates, 2001 Sheffield Drive, El Dorado Hills, CA 95762. June 2011.

***Attachments:** Building, Structure, and Object Record; Photograph Record; Project Location Map

*Required Information

B1. **Historic Name:** Fine Arts Center Building
B2. **Common Name:** Fine and Performing Arts Building
B3. **Original Use:** Educational Building **B4.** **Present Use:** Educational Building
***B5.** **Architectural Style:** Modernist-Classical/Formal/Abstract
***B6.** **Construction History:** According to San Mateo County Community College District records, construction began on the building in 1962 and it was completed in 1963.
***B7.** **Moved?** ■ No ☐ Yes ☐ Unknown **Date:** N/A **Original Location:**
***B8.** **Related Features:** The subject property is located atop a terraced hill overlooking San Mateo.
B9a. **Architect:** John Carl Warnecke **B9b.** **Builder:** Undetermined
***B10.** **Significance: Theme:** Modern Formal/Classical/Abstract Architecture and Education **Area:** San Francisco Bay Area/San Mateo
Period of Significance: 1963 **Property Type:** Educational Building **Applicable Criteria:** A, B and C

The historic context for the subject property reflects the post World War II expansion of San Mateo. During the Spanish Colonial period, Mission Dolores established a farming outpost and wayside hospice halfway down El Camino Real to San Jose in the area of present-day San Mateo. In the era of the ranchos, San Mateo became a stage stop. By 1863, the San Francisco-San Jose Railroad reached San Mateo, which boasted a waterfront and shipping industry. The city was platted and laid out by C. B. Polhemus in 1863 (Gudde 1969:290). In 1894, San Mateo was incorporated and by 1900, the population reached 1,832. The growth of San Mateo was slow, due to the disinclination of the wealthy San Franciscans west of the town, who built huge estates in Hillsborough, to subdivide and develop the area. Notable growth did not take place in San Mateo until after World War II, when housing tracts, shopping centers, and large educational plants were developed in the southern part of the city. In the 1950s, 70 percent of its working residents commuted to San Francisco, but by 1970 the majority worked in San Mateo at the electronic plants, retail stores, and business offices. With little manufacturing, San Mateo became geared toward tourism and commerce, promoting the Bay Meadows race track, parks, and retail shopping (Chapin et al. 1969:86-90; Gebhard 1985:133-134).

By 1950, the Hillsdale area of San Mateo was an evolving community and the need for new schools and college campuses to meet the demands of the burgeoning school district became apparent. The College of San Mateo, originally known as "College Heights" and completed in 1963, was designed by the Internationally recognized architect John C. Warnecke. Born on February 24, 1919 in Oakland, John Carl Warnecke earned a bachelor's degree from Stanford in 1941. He enrolled in Harvard's architecture school, where he studied with Walter Gropius and completed the three-year course in one year, receiving his master's degree in 1942. A football injury made him ineligible to serve in the military (Grimes 2010). Refer to BSO, Page 3 of 6.

B11. **Additional Resource Attributes:** N/A

B12. **References:** Alexander, Philip W. *History of San Mateo County*. 1916; Gebhard, David ed. *The Guide to Architecture in San Francisco and Northern California*. 1976, revised 1985; Gudde, Erwin G. *California Place Names*. Berkeley: University of California Press. 1969; Chapin, William et al. *The Suburbs of San Francisco*. San Francisco: Chronicle Books. 1969; Stone, Edward Durell. *Edward Durell Stone: Recent and Future Architecture*. New York: Horizon Press. 1967; College of San Mateo Archives, Historical Photograph Collection. Accessed June 2010; Grimes, William. "John Carl Warnecke, Architect to Kennedy, Dies at 91." *New York Times*, April 22, 2010; Betsky, Aaron. "John Carl Warnecke." Architect Magazine. www.architectmagazine.com. May 2010.

B13. **Remarks:** None
B14. **Evaluator:** Dana E. Supernowicz, Architectural Historian, Historic Resource Associates, 2001 Sheffield Drive, El Dorado Hills, CA 95762.
Date of Evaluation: June 2011

(This space reserved for official comments.)

*Required Information

***B10. Significance: (Continued):**

After working for the housing authority in Richmond and as a draftsman in his father's firm, he set up his own architectural practice and developed a reputation for his environmentally sensitive designs for buildings at Stanford and the University of California, Berkeley. His contextual approach was applied at the Mira Vista Elementary School in El Cerrito (1951), which appeared to grow organically out of the hills behind it. His open-space design for the Mabel McDowell Elementary School in Columbus, Indiana (1960), designated a National Historic Landmark in 2001, addressed the flat landscape, with its silos, barns and Victorian houses. By 1977 Warnecke was running the largest architectural firm in the United States, with offices in San Francisco, Los Angeles, New York, Boston, Washington and Honolulu. His large-scale projects included the AT&T Long Lines Building on Thomas Street in Manhattan (1974), the Soviet Embassy (1975) and the Hart Senate Office Building (1982) in Washington, and the South Terminal at Logan Airport in Boston (1977). After 1977 he began scaling down his practice. In retirement, he grew grapes on his ranch in the Alexander Valley and worked on his memoirs, which he completed shortly before his death on April 22, 2010 (Grimes 2010; Betsky 2010).

Another important nationally recognized Modernist architect whose work was similar to Warneckes' was Edward Durell Stone. In the mid-1950s Stone moved away from strict modernist tenets and began to fuse the formalism of his early Beaux-Arts training with a romantic historicism. This historicizing aspect of Stone's work was in part influenced by his second wife, Maria Elena Torchino, and his frequent travels to Italy , which reawakened his interest in classical and Italianate precedent. A cover story on Stone in the March 31, 1958 issue of Time magazine led to a series of important national and international commissions, and Stone's firm grew in size from 20 architects to over 200. No longer an intimate design atelier, Stone's office became a stratified corporate entity and his work became uneven and formulaic. Stone continued to garner major architectural commissions into the early 1970s. The State University of New York at Albany, the John F. Kennedy Center for the Performing Arts in Washington, DC, and the Standard Oil Building in Chicago were notable examples of late phase work (Stone 1967).

The College of San Mateo Fine Arts Building and the other campus buildings from the early 1960s represents some of Warnecke's finest achievements in Modern Eclectic architectural design that blended abstract styles with Neo-Classical or formal architecture to form a cohesive campus that visually represented his values in higher education and the natural setting he was engaged in developing. Warnecke's later work, particularly during the 1980s, has been said to be sub-par with his earlier work, particularly during the 1950s and 1960s. Today, the College of San Mateo consists of approximately 17 buildings. The original 1963 Warnecke buildings are distinguishable for their Modernist design influenced by Classicism and abstraction having concrete panel walls, flat roofs, arcades, banks of arched windows, and abstract sun screens. The newer campus buildings tend to be more abstract lacking the formalism or Classicism embodied in the designs provided by Warnecke.

As a whole the campus still retains a strong sense of architectural continuity from the 1960s, despite new building additions, minor alterations to the water feature in front of the Fine and Performing Arts Building, and increased campus parking and service structures. In conclusion, the buildings designed by Architect John Carl Warnecke and constructed in 1962-1963 appear to be contributing elements to a National Register of Historic Places (NRHP) campus historic district associated with Modern Architecture (1962-1963) and an important regional example of this form of architecture designed by the renowned and Internationally recognized architect John Carl Warnecke. The contributing buildings include the Fine and Performing Arts (Building 3), Administration (Building 1), Gymnasium (Building 8), and Library (Building 9). The campus building and structures constructed post-1965 and not part of the original Warnecke plan for the campus are non-contributing elements to the district. Refer to BSO, Page 4 of 6.

*B10. Significance: (Continued):



View of the campus, circa 1964, looking at Buildings 14 and 16 on the left and the Library (Building 9) on the right (courtesy College of San Mateo Archives, Historical Photograph Collection)



View of the pool and fountain from the Library looking towards the Fine and Performing Arts Center, early 1960s (courtesy College of San Mateo Archives, Historical Photograph Collection, Photograph #000497).

*B10. Significance: (Continued):



View of Fine and Performing Arts Center in 1963, the year the campus opened (courtesy College of San Mateo Archives, Historical Photograph Collection).



Fine and Performing Arts Center view through the plaza early 1960s (courtesy College of San Mateo Archives, Historical Photograph Collection, Photograph #000497).

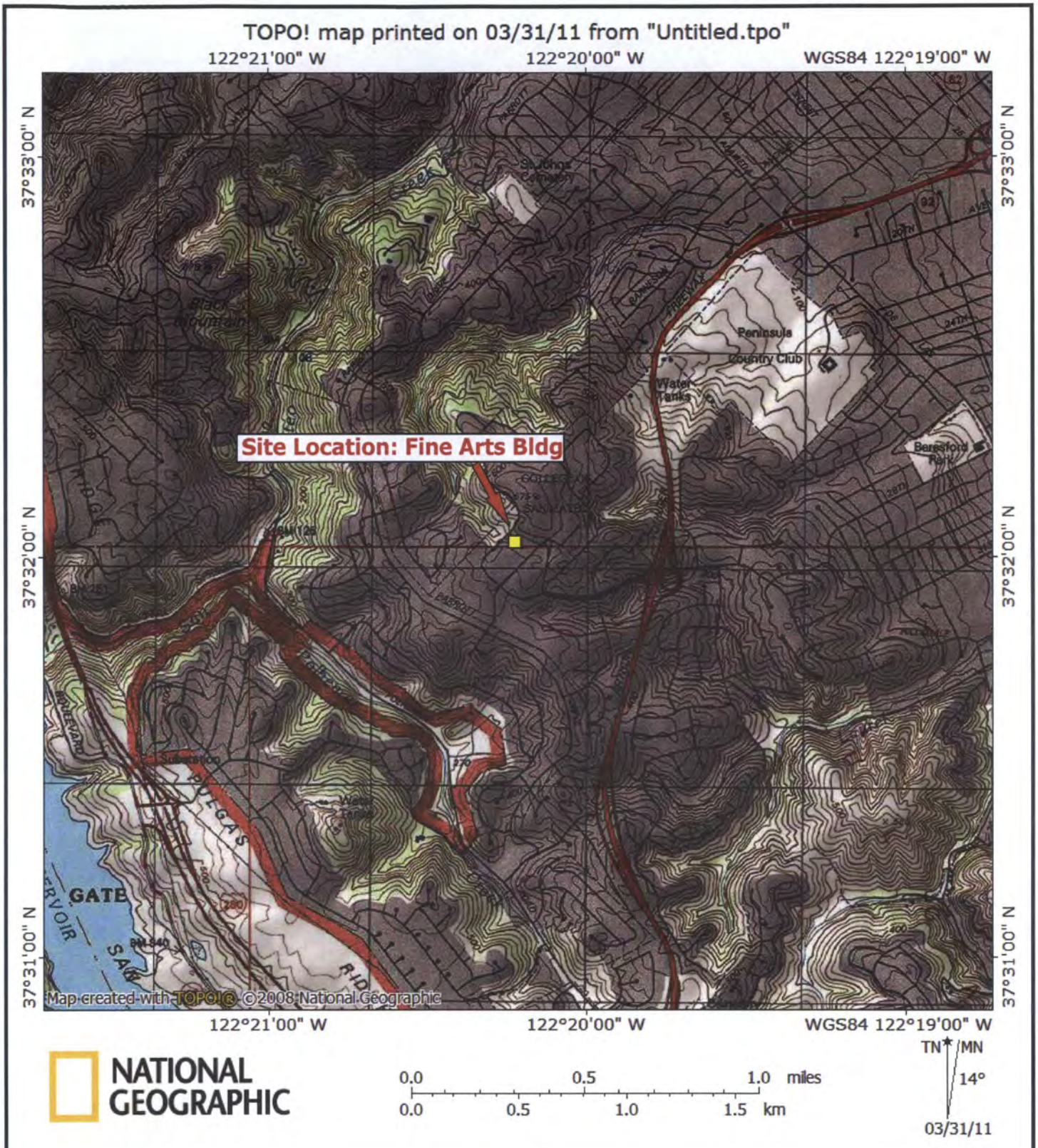
***B10. Significance: (Continued):**



Fine and Performing Arts Center Building, 1970 (courtesy College of San Mateo Archives, Historical Photograph Collection, Photograph #000497).



**Aerial Photograph of the College of San Mateo, 2011
(The arrow points to the Fine and Performing Arts Building).**



EarthTouch, Inc.
3135 North Fairfield Road
Layton, Utah 84041
Tel: 801.771.2800
Fax: 801.771.2838

Topographic Map
(Site Location)
College of San Mateo
Fine & Performing Arts Bldg
1700 W Hillsdale Drive
San Mateo City and County, CA 94402
T5S R4W Section 6

Figure: TOPO/APE Map

Project: CA-CNU1796-ERI / College of San Mateo

Source: USGS 7.5-minute quadrangle San Mateo, CA

D-4

Native American Correspondence

Fax Transmission

Date:	May 8, 2015
Attention:	Debbie Pilas-Treadway, Native American Heritage Commission
Fax Number:	916-373-5471
Number of Pages:	1
From:	Joanne Grant, Senior Archaeologist
Subject:	**Sacred Lands File Search Request**
Client: **Project:**	San Mateo County Community College District (SMCCCD) 2015 Facilities Master Plan Amendment, Project #234.15

Dear Ms. Pilas-Treadway,

The San Mateo County Community College District (District) proposes improvements at 3 campuses in San Mateo County: Cañada College in Redwood City and the Town of Woodside, College of San Mateo (CSM) in the City of San Mateo, and Skyline College in the City of San Bruno. The planned improvements include building modernization and renovation, building demolition, new building construction, tree removal, landscaping/ pedestrian improvements, changes in parking and roadways, and potential renewable energy installations.

The project locations for each of the 3 campuses are provided below.
Cañada College: Woodside Quad, T5S and T6S, R4W, unsectioned
College of San Mateo: Palo Alto Quad, T4S and T5S, R4W, unsectioned
Skyline College: San Francisco South and Montara Mountain Quads, T3S, R5W and 6W, unsectioned

I am requesting the following information:

1) Groups or individuals the NAHC believes should be notified regarding this project; and
2) Identification by the NAHC of any sacred lands within the subject lands that are listed within the Sacred Lands file.

Thank you for your assistance. Feel free to contact me with any questions regarding this request.

Sincerely,

Joanne S. Grant, RPA

620 Folsom Street, 2nd Floor — San Francisco, CA 94107 — 415.677.7100 — 415.677.7177 fax — icfi.com

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd.
West Sacramento, CA 95691
(916) 373-3710
Fax (916) 373-5471

June 8, 2015

Joanne Grant
ICF
620 Folsom Street, 2nd Floor
San Francisco, CA 94107

FAX: 415-677-7177

2 Pages
2015 Facilities Master Plan Amendment project 234.15, San Mateo, County

Ms. Grant;

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 373-3713.

Sincerely,

Debbie Pilas-Treadway
Environmental Specialist III

Native American Contacts
San Mateo County
June 8, 2015

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Ohlone/Costanoan

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Ohlone/Costanoan

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Ohlone/Costanaon

Muwekma Ohlone Indian Tribe of the SF Bay Area
Rosemary Cambra, Chairperson
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(510) 581-5194
Ohlone / Costanoan

Amah MutsunTribal Band of Mission San Juan Bautista
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(650) 400-4806 Cell

(650) 332-1526 Fax
Ohlone/Costanoan

The Ohlone Indian Tribe
Andrew Galvan
P.O. Box 3152
Fremont , CA 94539
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(510) 882-0527 Cell

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Plains Miwok
Patwin

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Ramona Garibay, Representative
30940 Watkins Street
Union City , CA 94587
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(510) 972-0645
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Bay Miwok
Plains Miwok
Patwin

Coastanoan Rumsen Carmel Tribe
Tony Cerda, Chairperson
240 E. 1st Street
Pomona , CA 91766
rumsen@aol.com
(909) 524-8041 Cell
(909) 629-6081
Ohlone/Costanoan

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed 2015 Facilities Master Plan Amendment, project 234.15, San Mateo County.

August 6, 2015

Andrew Galvan
PO Box 3152
Fremont, CA 94539

Subject: 2015 Facilities Master Plan Amendment, Project #234.15 – San Mateo County

Dear Mr. Galvan,

The San Mateo County Community College District (District) proposes improvements at 3 campuses in San Mateo County: Cañada College in Redwood City and the Town of Woodside, College of San Mateo (CSM) in the City of San Mateo, and Skyline College in the City of San Bruno. The planned improvements include building modernization and renovation, building demolition, new building construction, tree removal, landscaping/ pedestrian improvements, changes in parking and roadways, and potential renewable energy installations.

The project locations for each of the 3 campuses are provided below.
Cañada College: Woodside Quad, T5S and T6S, R4W, unsectioned
College of San Mateo: Palo Alto Quad, T4S and T5S, R4W, unsectioned
Skyline College: San Francisco South and Montara Mountain Quads, T3S, R5W and 6W, unsectioned

The Native American Heritage Commission searched their sacred lands database, which failed to indicate the presence of Native American cultural resources within the immediate project area. They also provided your name as a Native American representative who may have knowledge of cultural resources within or near the project area.

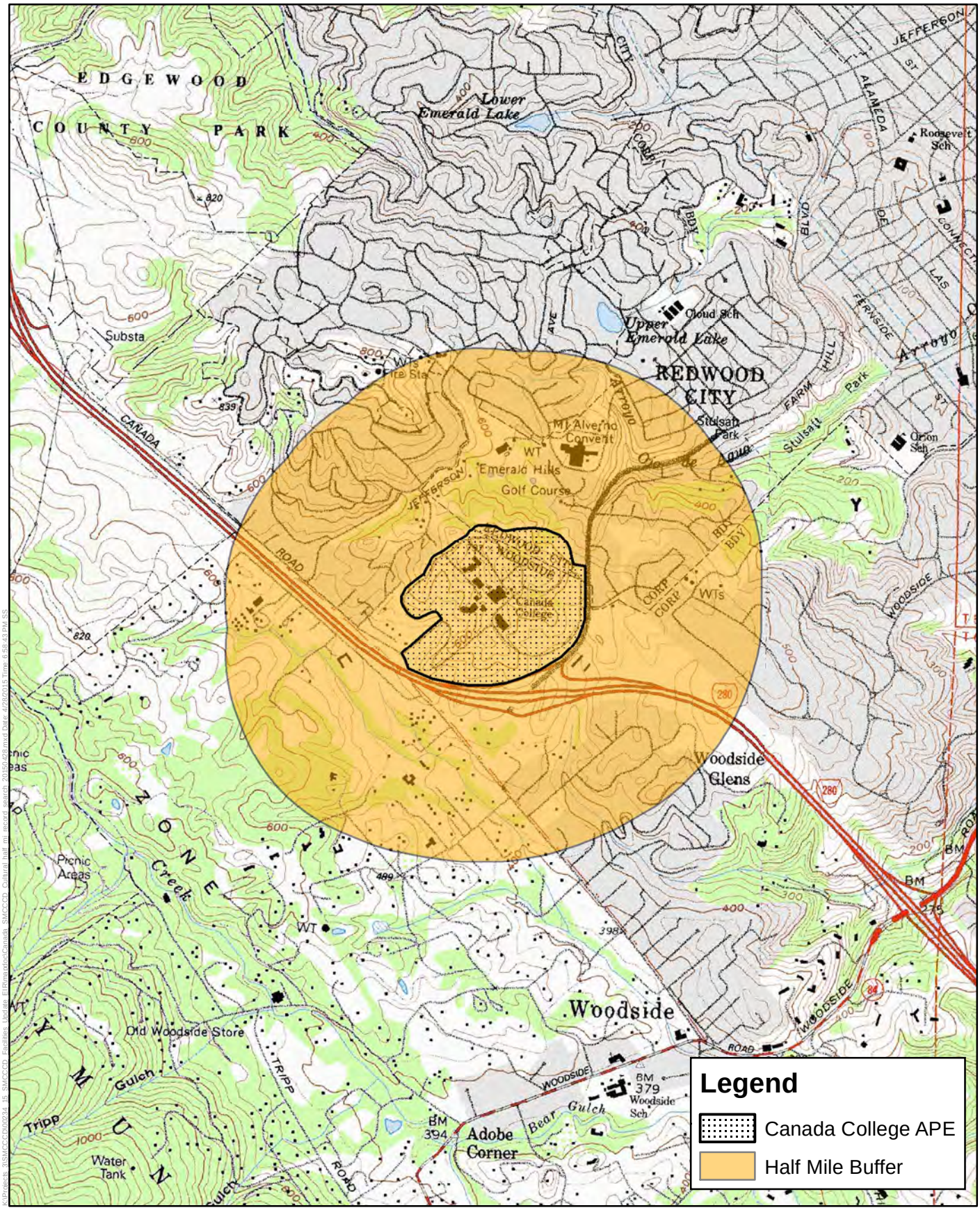
Please contact me by telephone (415) 677-7132 or by e-mail (lily.henryroberts@icfi.com) if you have any questions, concerns, or information regarding the sensitivity of the project area.

Sincerely,

Lily Henry Roberts
Archaeologist

Map Enclosed

620 Folsom Street, 2nd Floor — San Francisco, CA 94107 — 415.677.7100 — 415.677.7177 fax — icfi.com



ICF INTERNATIONAL

N

0 0.5 1

Miles

1:24,000

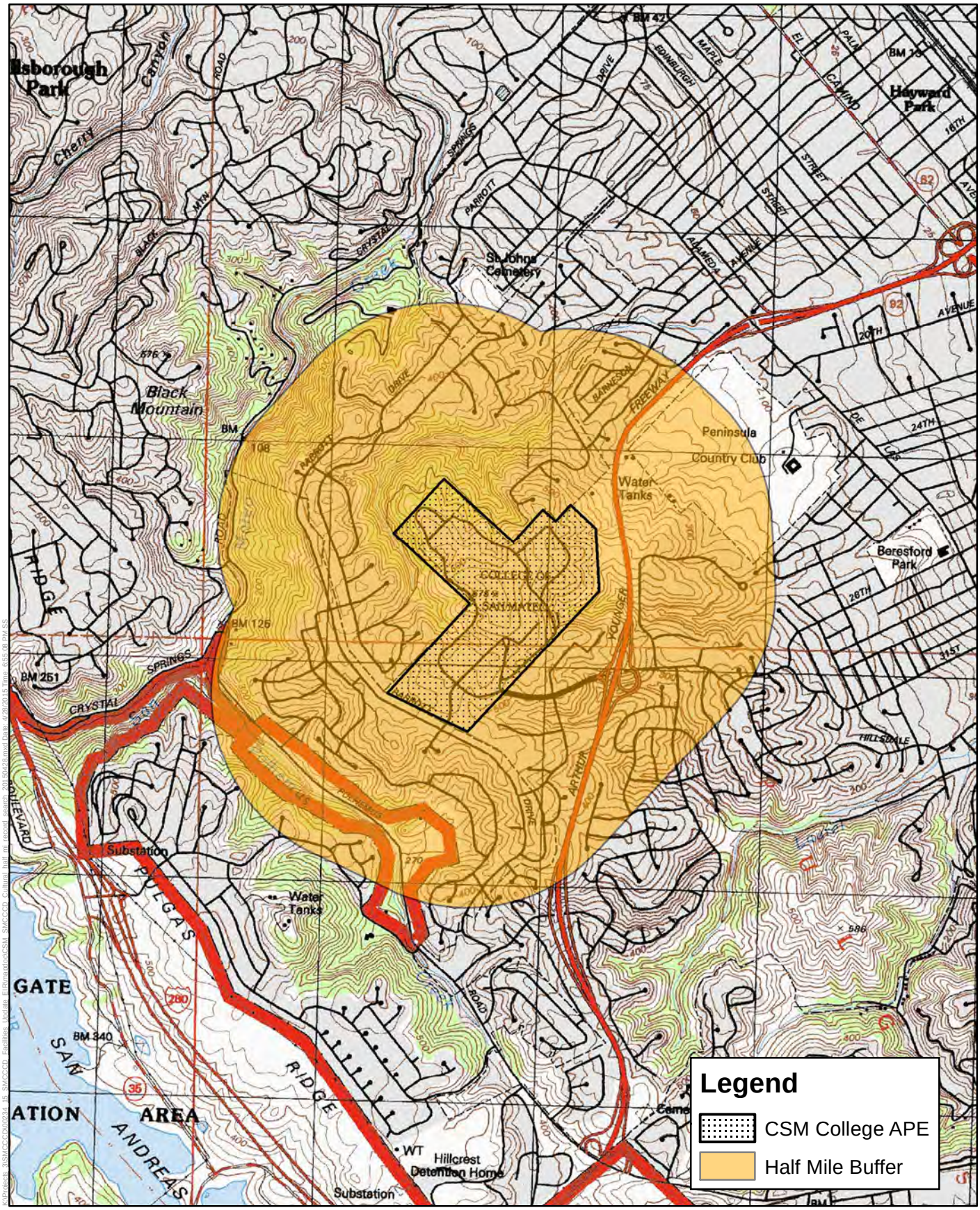
San Mateo County Community College District - Canada College

Topo Quad(s): Woodside, Palo Alto

Public Land Survey:

Land Grants, Civil Colonies: Pulgas

Land Grants, Civil Colonies: Canada de Raymundo



ICF INTERNATIONAL

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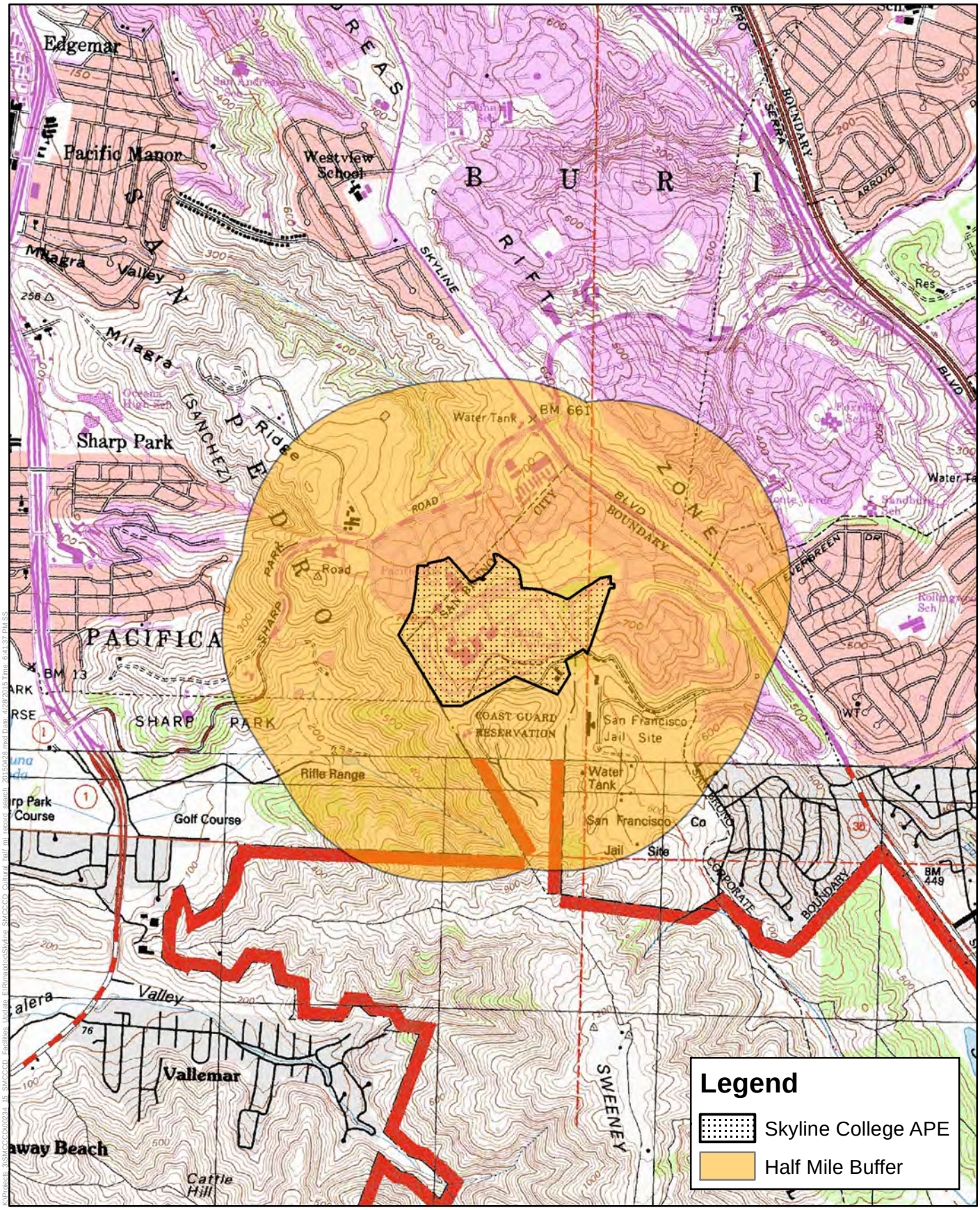
San Mateo County Community College District - CSM College

Topo Quad(s): San Mateo

Public Land Survey:

Land Grants, Civil Colonies: Pulgas

Land Grants, Civil Colonies: San Mateo



ICF INTERNATIONAL

N

0 0.5 1

Miles

1:24,000

San Mateo County Community College District - Skyline College

Topo Quad(s): Montara Mountain, San Francisco South

Public Land Survey:

Land Grants, Civil Colonies: Buri Buri

Land Grants, Civil Colonies: San Pedro - Sanchez

Appendix E

Transportation and Traffic Calculations

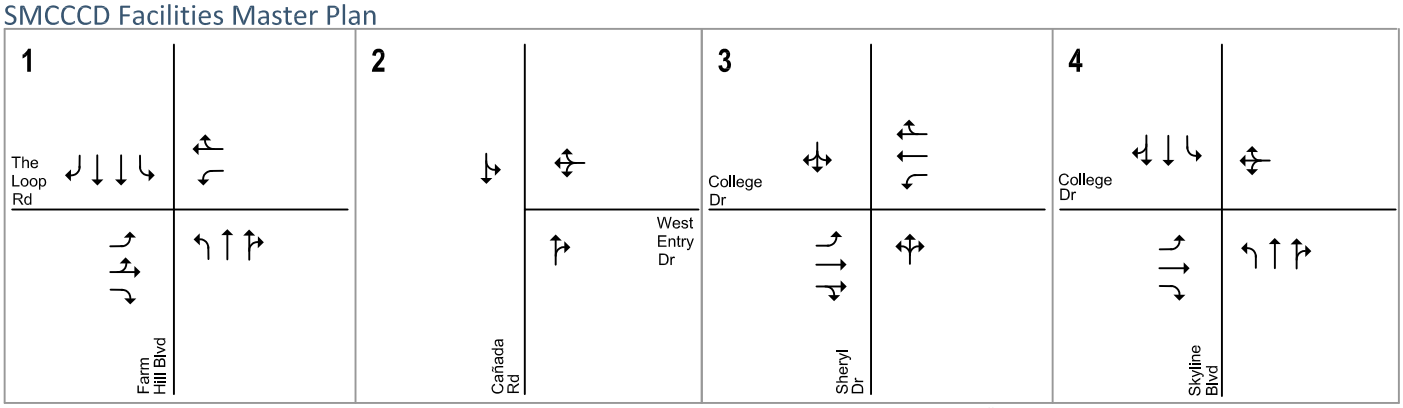
Appendix E-1: Figures and Tables

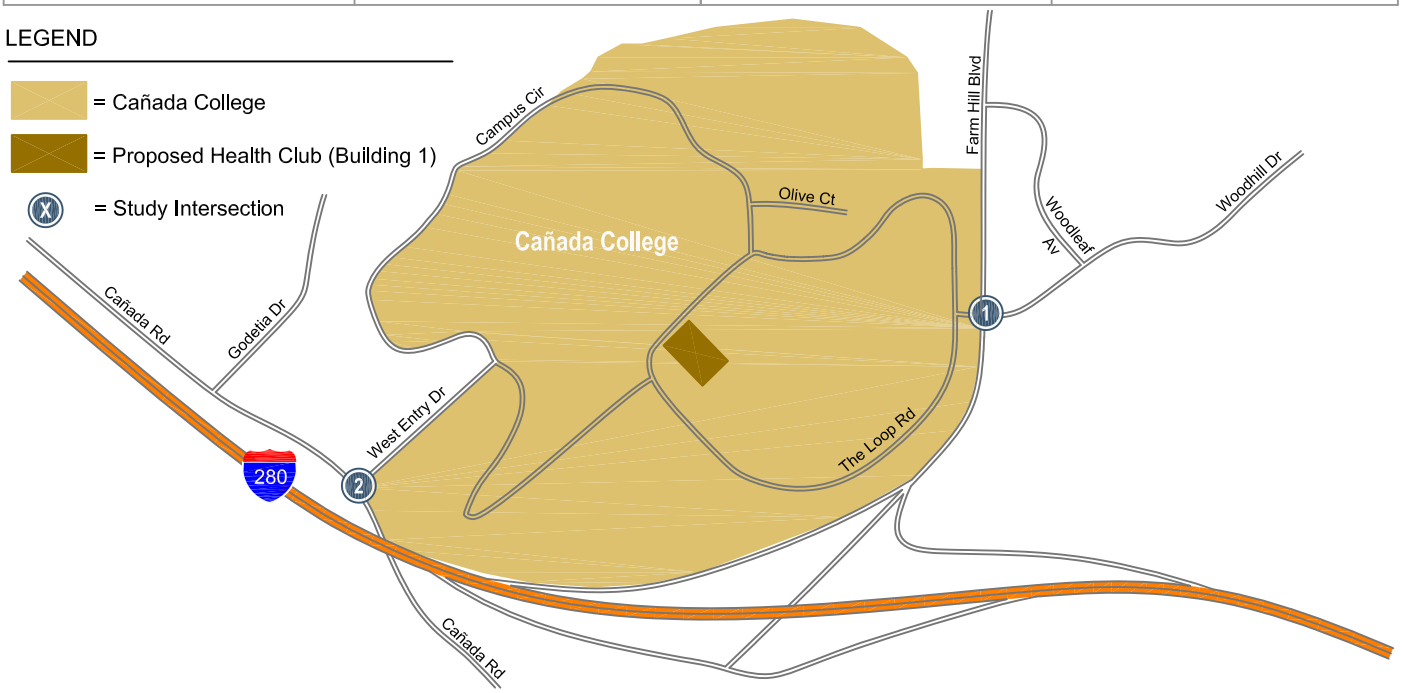
Appendix E-2: Traffic Counts

Appendix E-3: Traffic Volumes

Appendix E-4: LOS Calculations

Figures and Tables





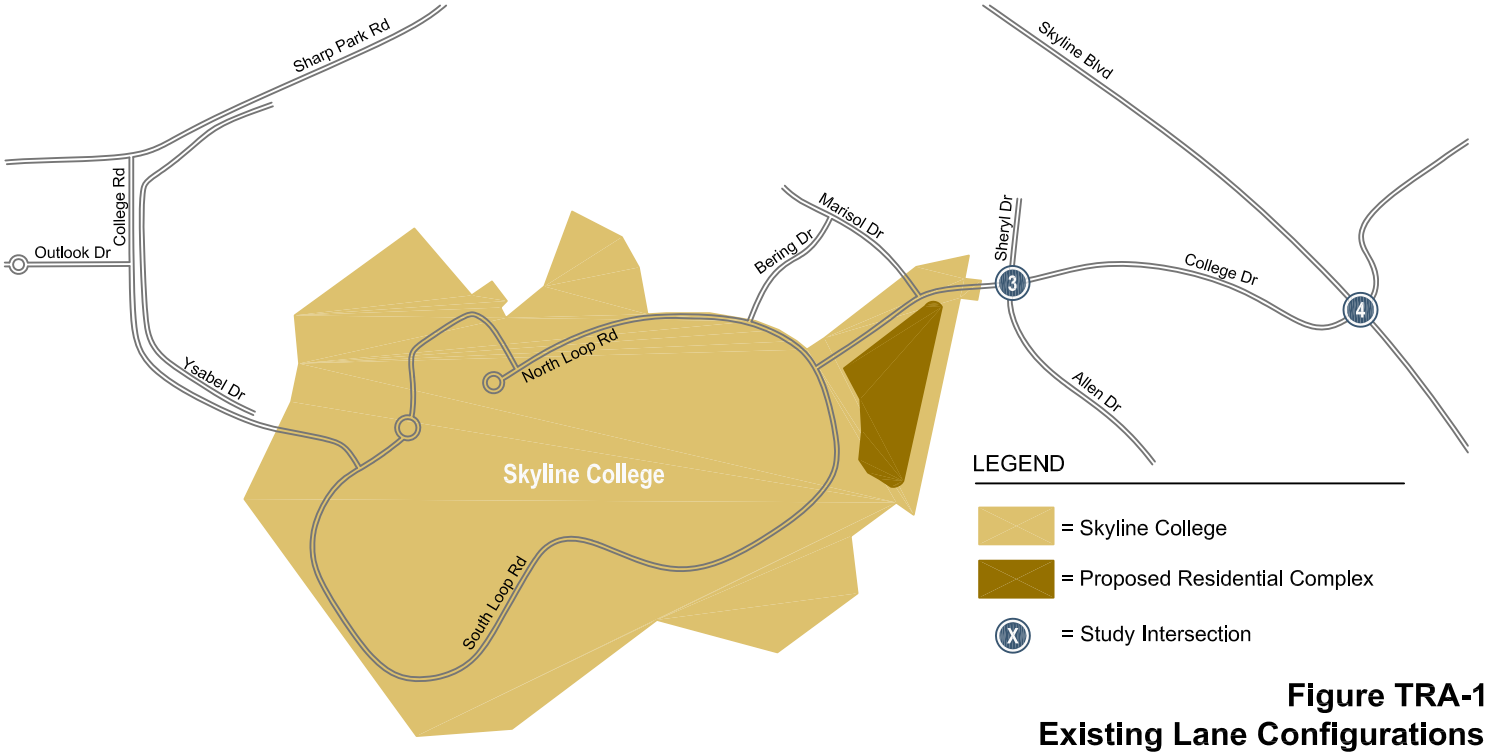
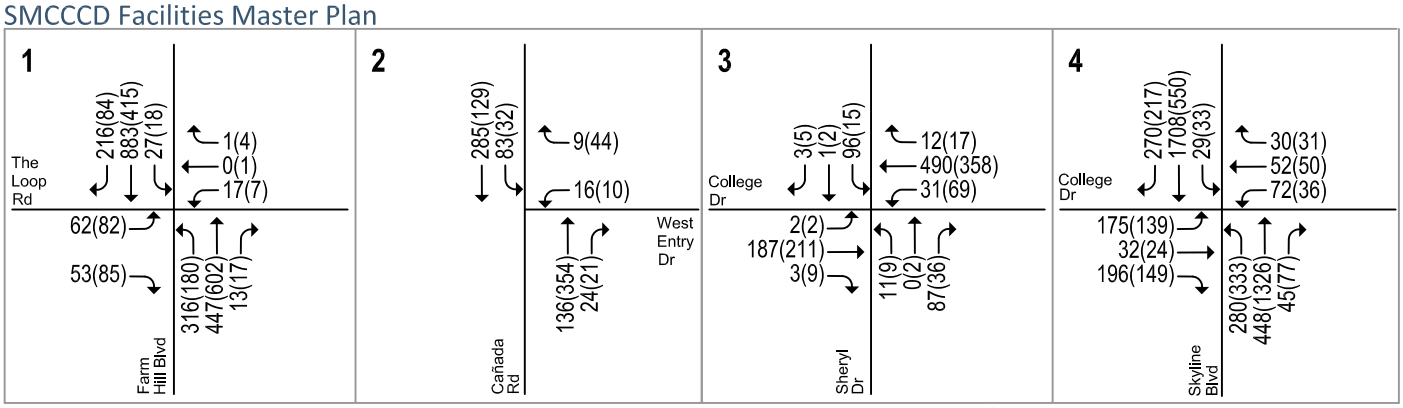
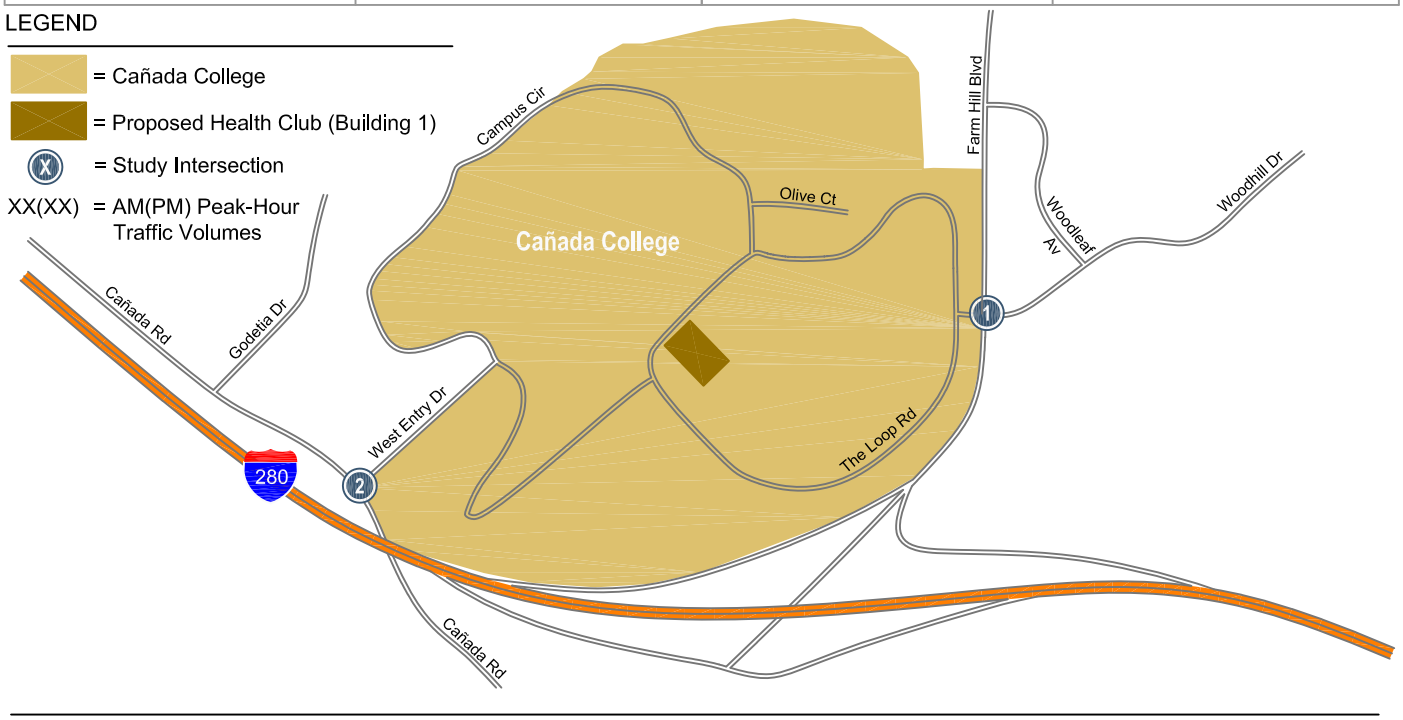


Figure TRA-1
Existing Lane Configurations

NORTH
Not to Scale





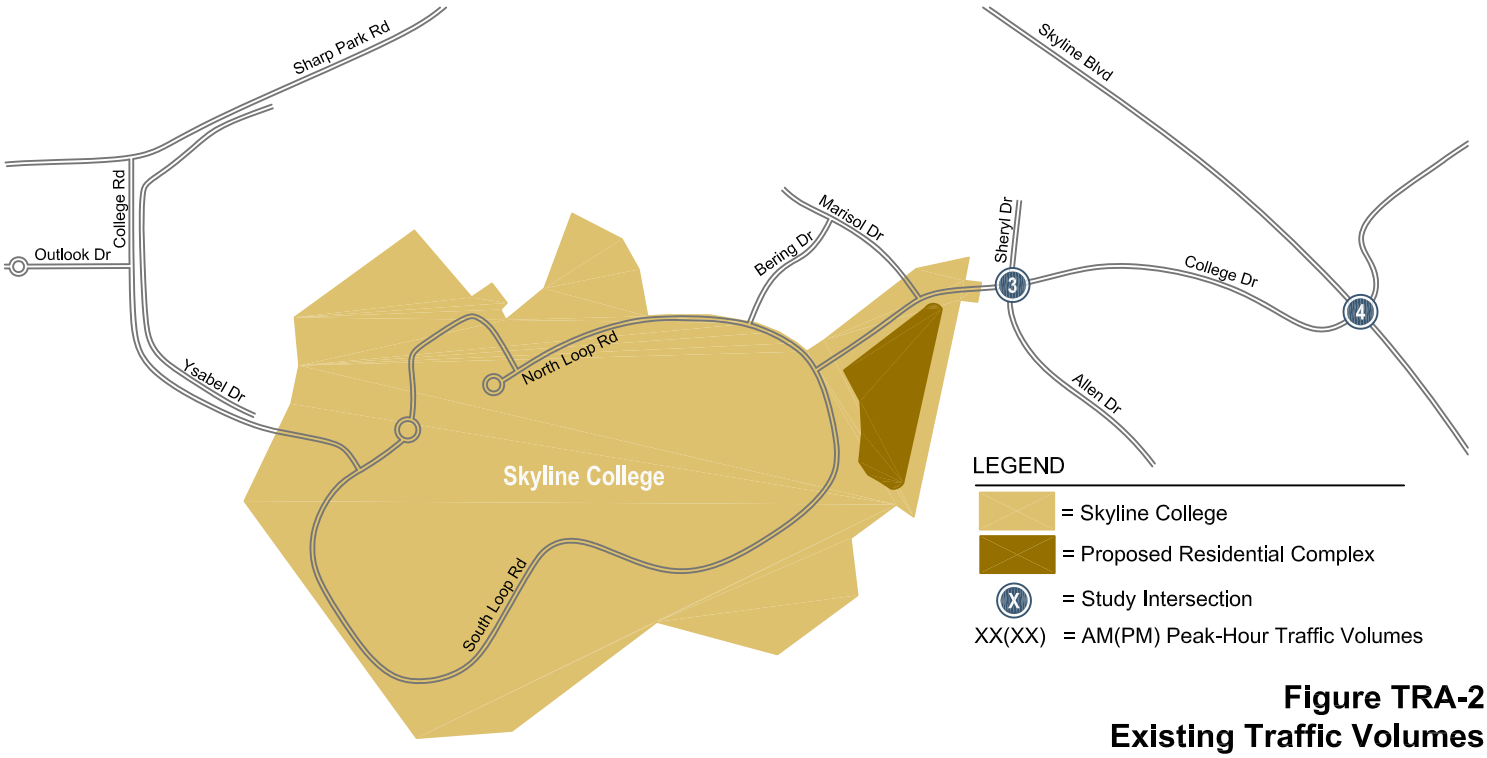


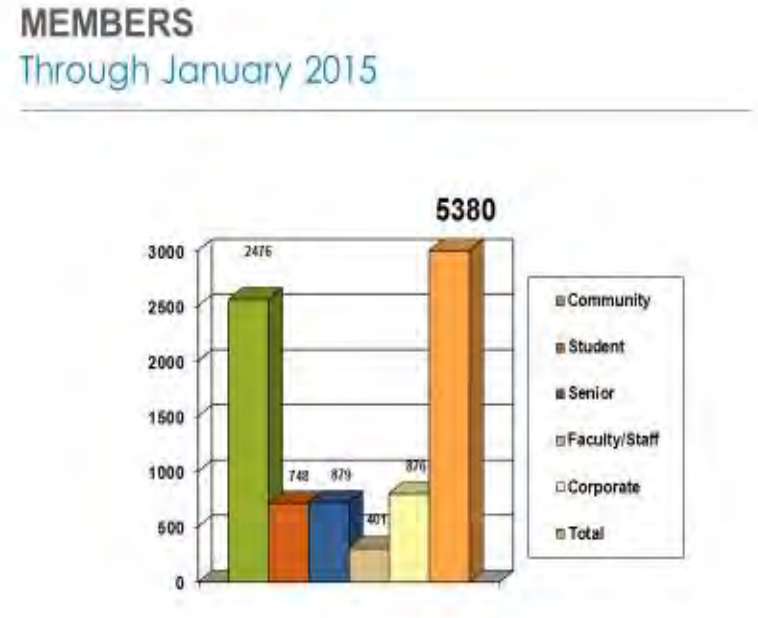
Figure TRA-2
Existing Traffic Volumes

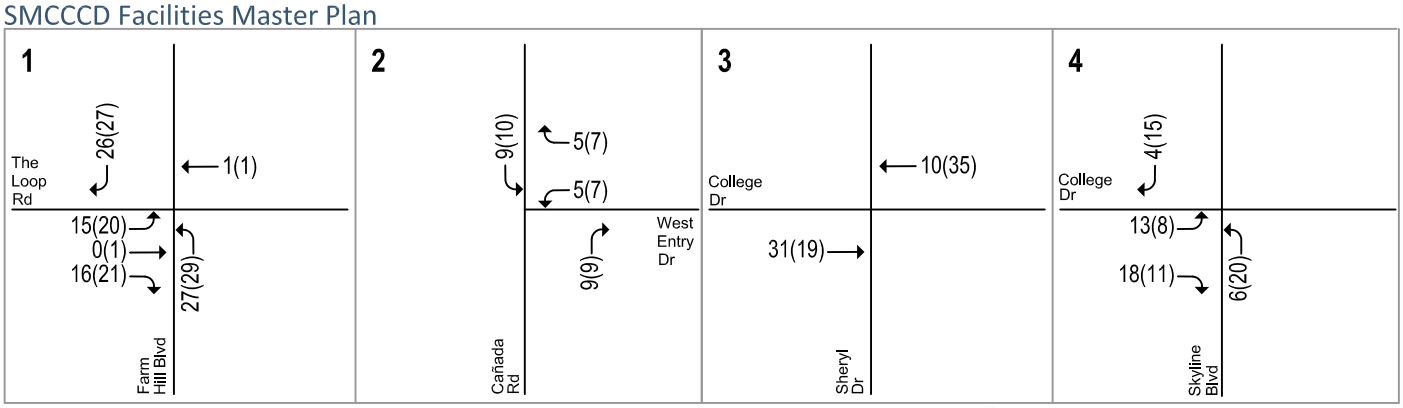
NORTH
Not to Scale

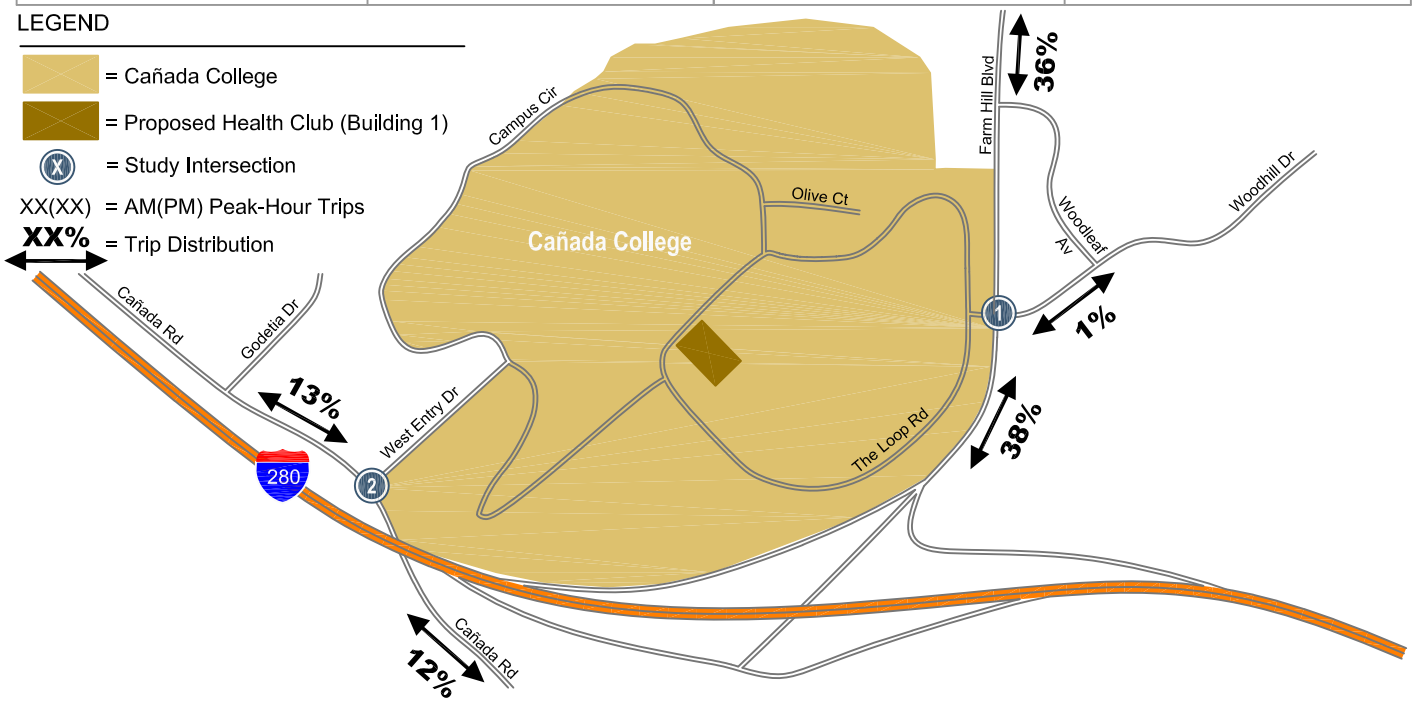
Table TRA-1. College of San Mateo Health Club Usage and Vehicle Trip Rate Estimates

		Daily Vehicle Trip Rates	Weekday Check-ins[1]	AM Peak Hour (weekday)						PM Peak Hour (weekday)					
				Pk-Hr Trip Rate	Split		In[1]	Out[1]	Check-Ins & -Outs[2]	Pk-Hr Trip Rate	Split		In[1]	Out[1]	Check-Ins & -Outs[3]
					In	Out					In	Out			
Member Check-Ins															
All Members	5,014		866				76	45	121				80	59	139
General Public Members[4]	3,943		681				60	35	95				63	46	109
Vehicle Trip and Trip Rate Estimates															
All Members[5]	5,014	0.14	681	0.02	63%	37%	60	35	95	0.02	58%	42%	63	46	109

Notes:
Table developed by Hexagon Transportation Consultants.
1. Based on 2014 September Check-Ins Data collected by SMCCCD. There were 5,014 members as of September 2014.
2. AM peak hour check-ins & -outs include 84 check-ins in 8-9 am and 52 check-ins in 7-8 am which was assumed to exit in 8-9 am.
3. PM peak hour check-ins & -outs include 94 check-ins in 5-6 pm and 65 check-ins in 4-5 pm which was assumed to exit in 5-6 pm.
4. It was assumed that faculty, staff, and student members go to the club before and after work or school, so they don't generate additional vehicle trips.
   Therefore, check-ins were calculated for the general public (GP) members, using the ratio of GP members to all members.
   It was assumed that the membership breakdown in September 2014 would be similar to the breakdown in January 2015.
5. Daily and peak-hour trip rates were calculated using chick-ins from GP members. It is assumed one vehicle trip per check-in.







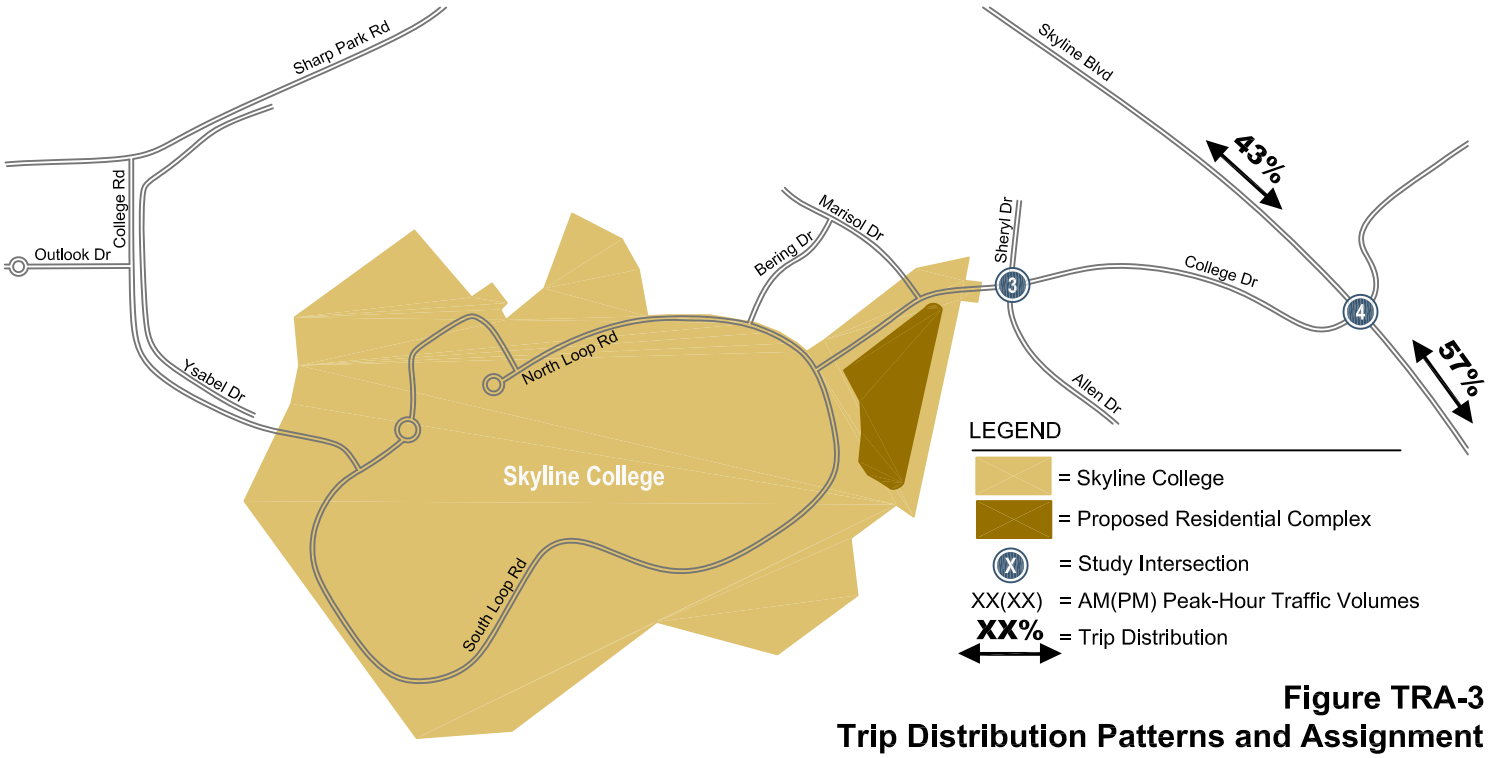
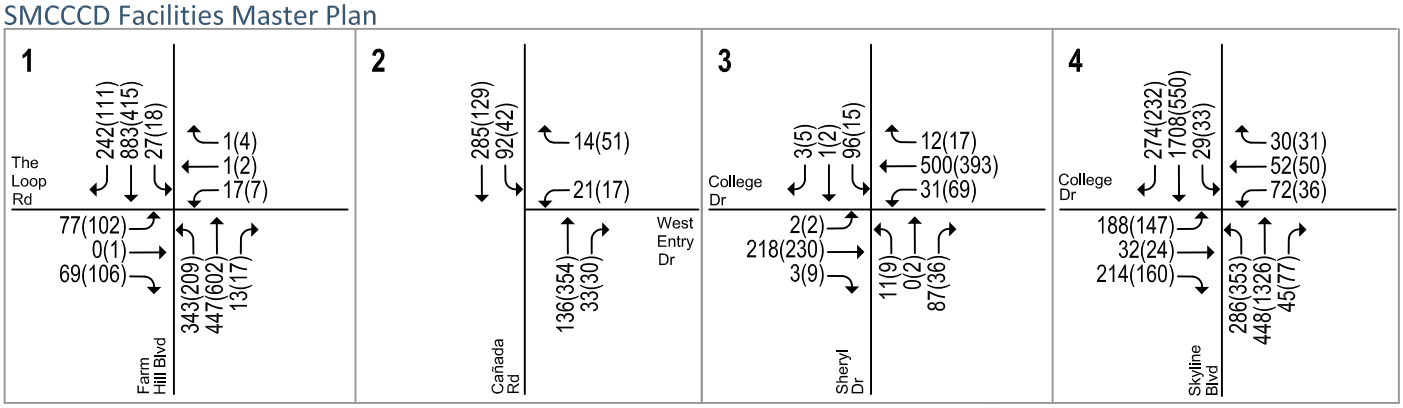
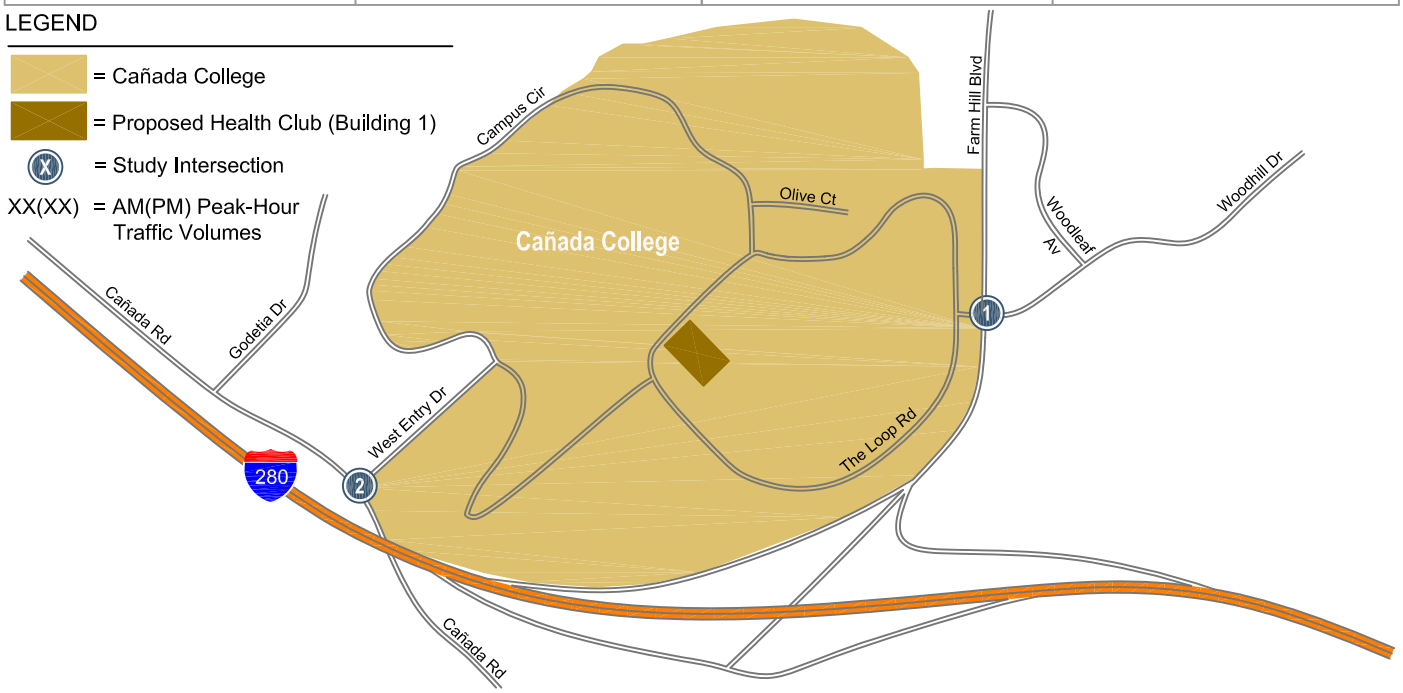


Figure TRA-3
Trip Distribution Patterns and Assignment

NORTH
Not to Scale





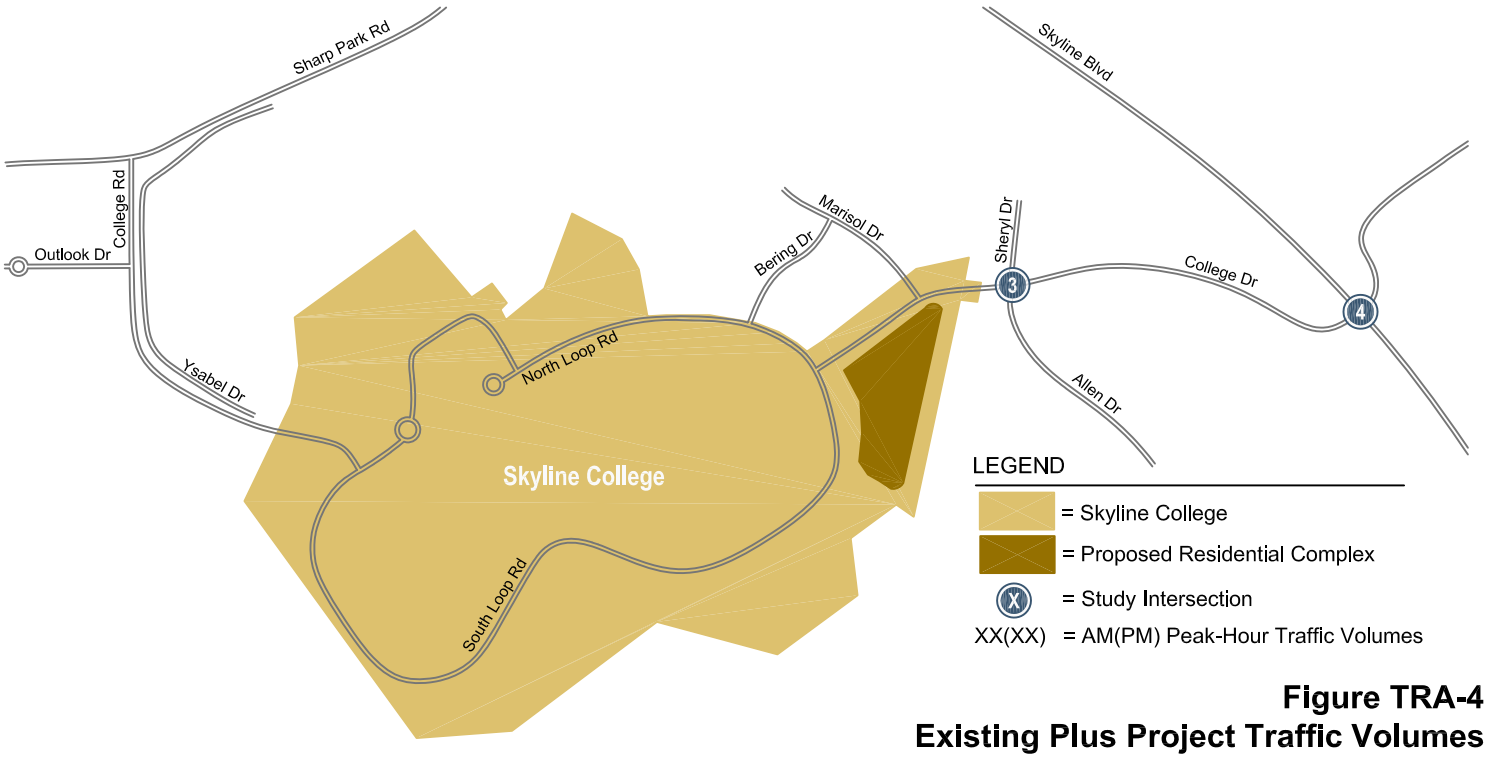
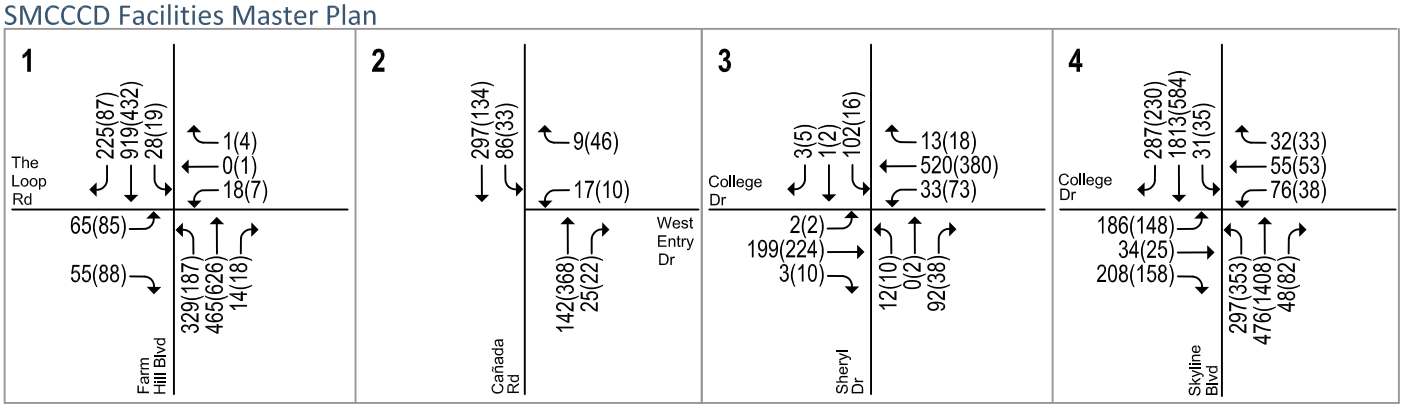
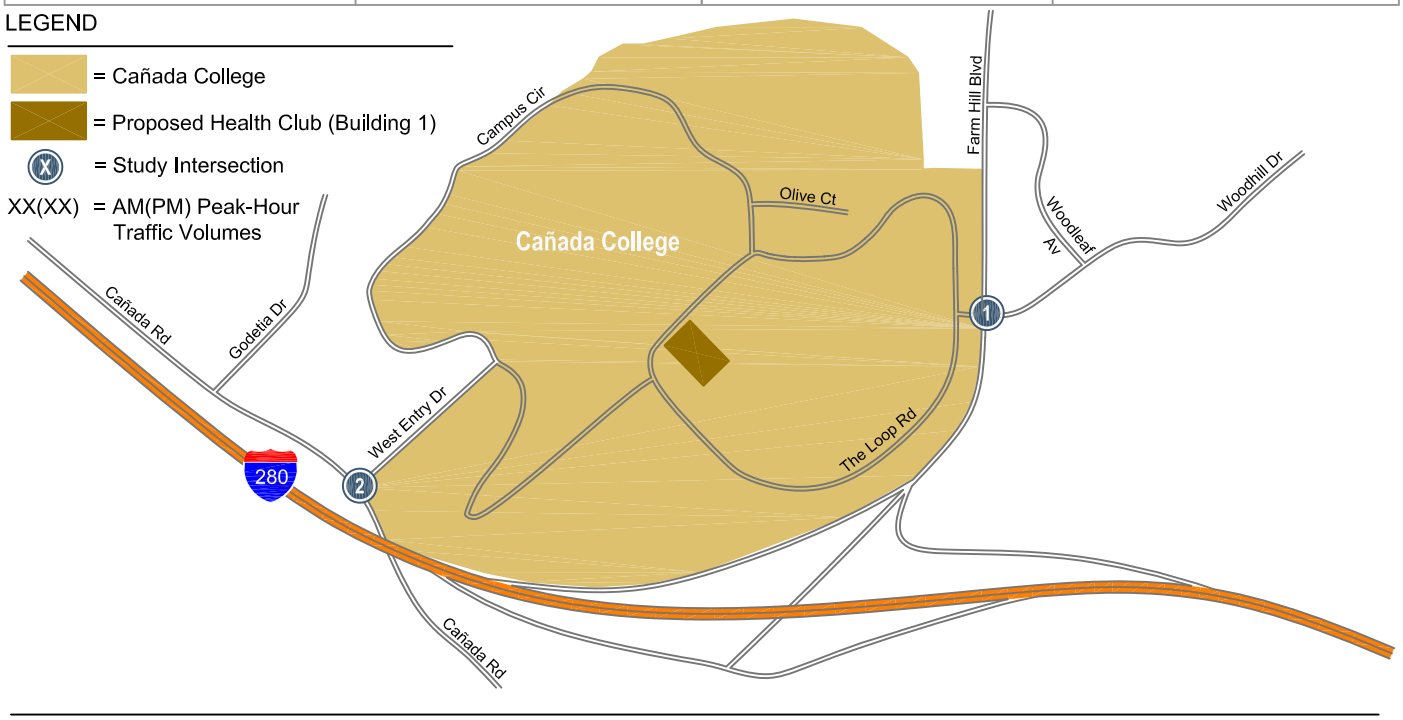


Figure TRA-4
Existing Plus Project Traffic Volumes





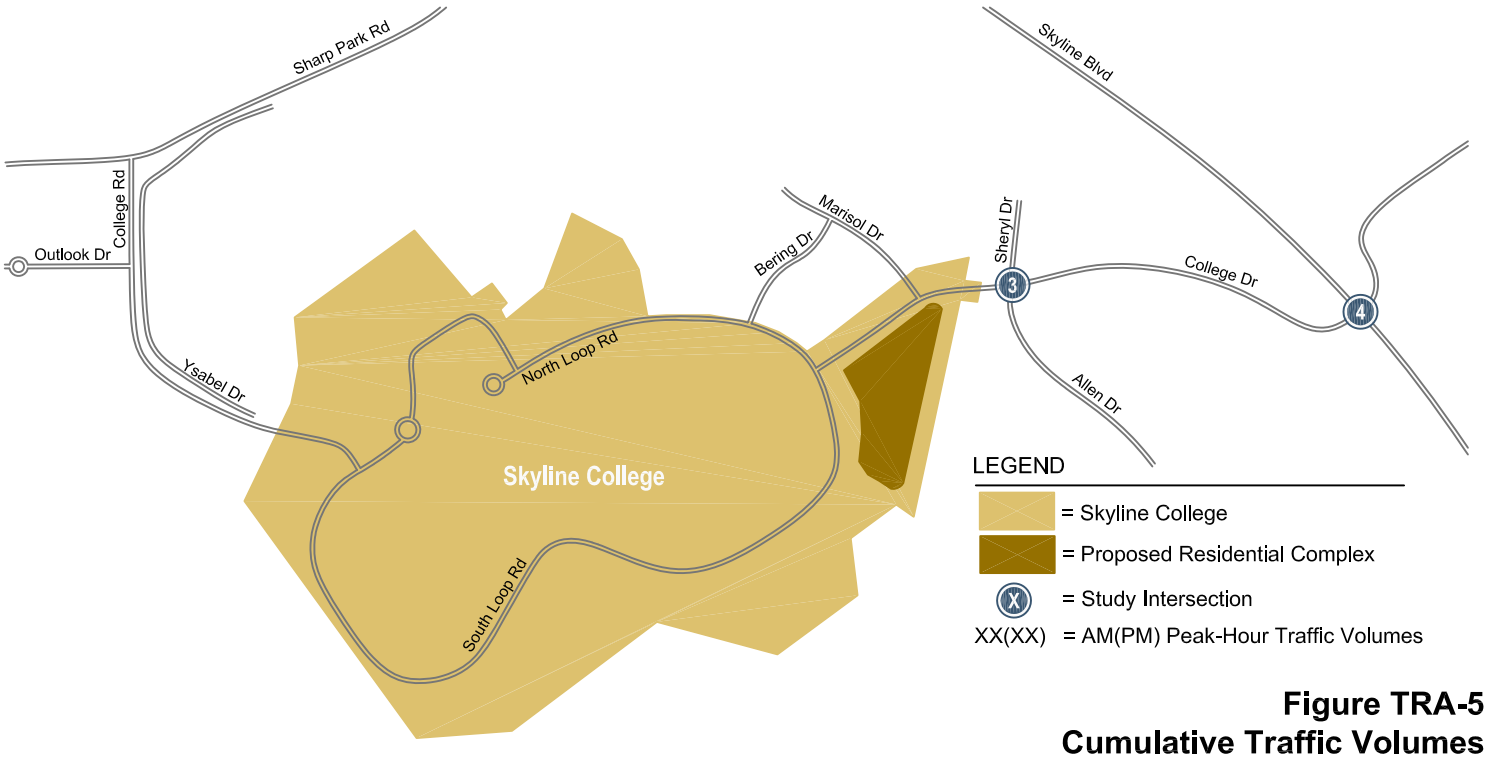
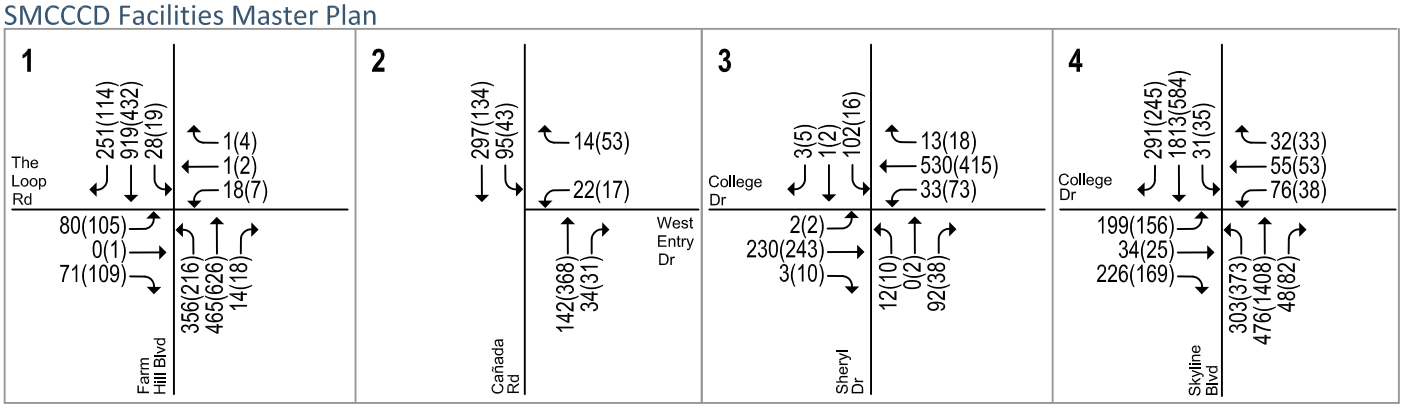
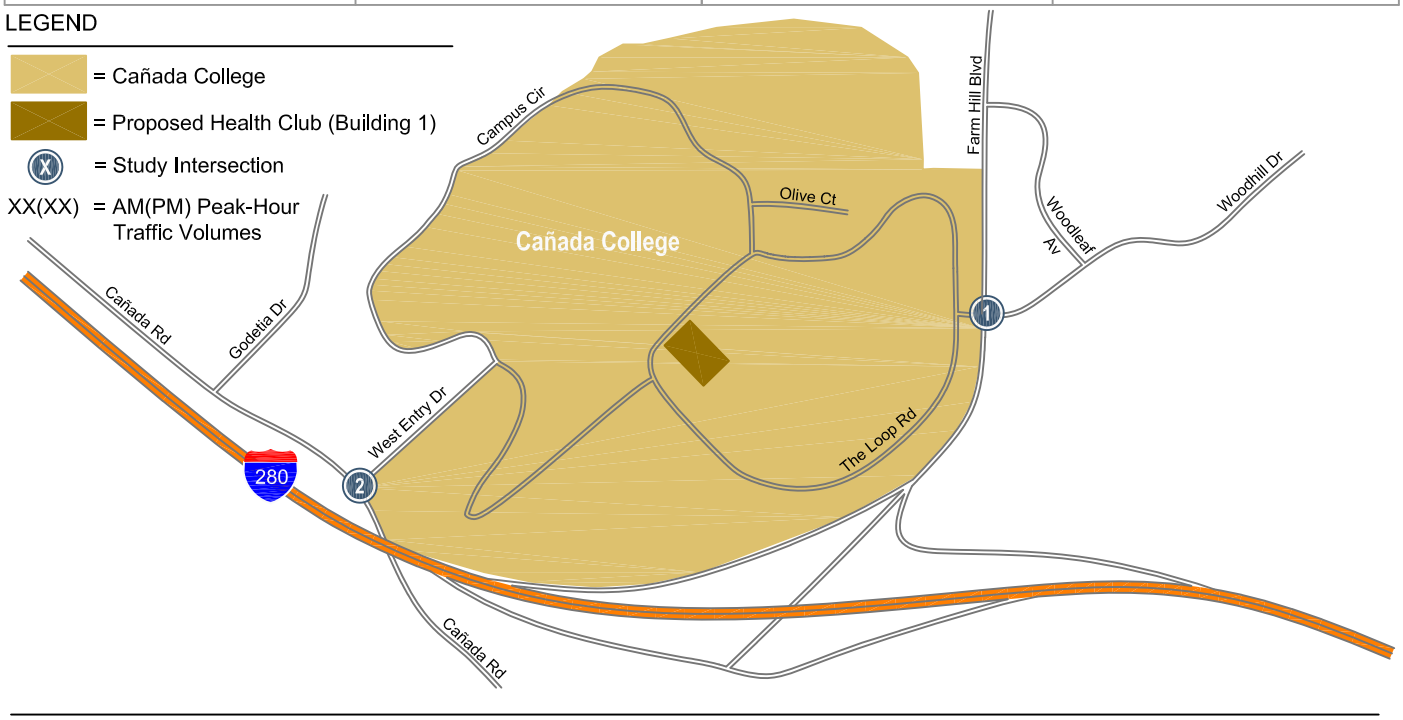


Figure TRA-5
Cumulative Traffic Volumes

NORTH
Not to Scale





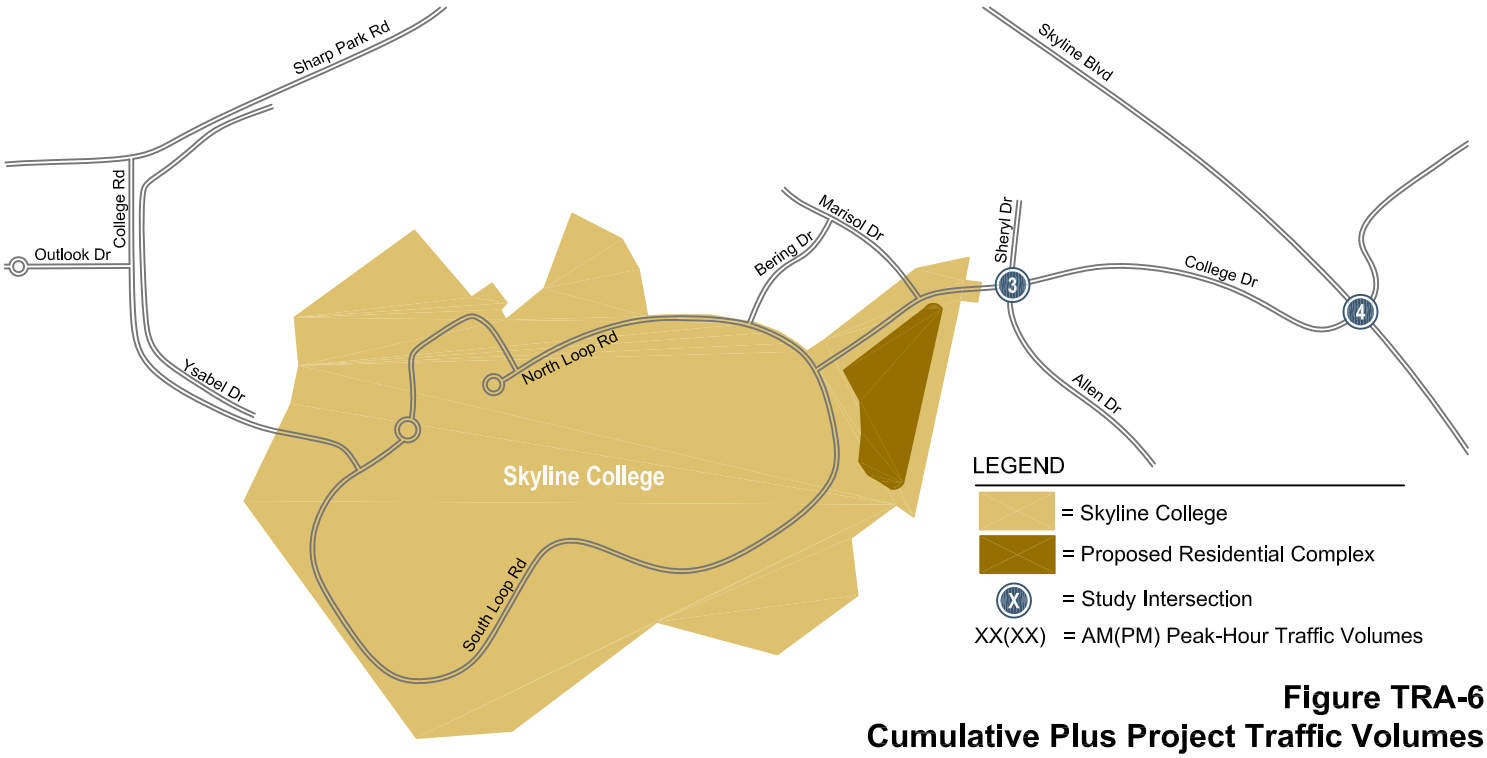


Figure TRA-6
Cumulative Plus Project Traffic Volumes

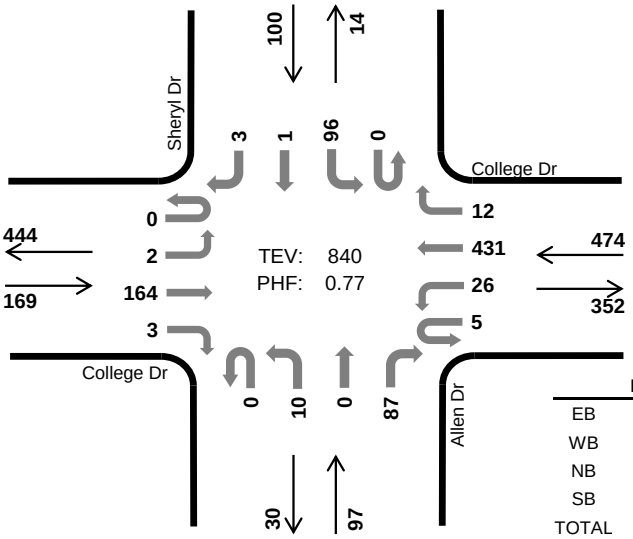
NORTH
Not to Scale

Traffic Counts

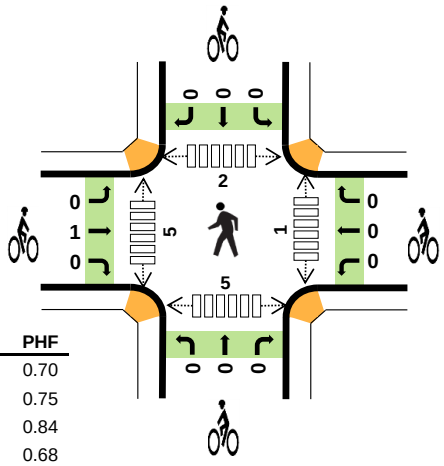
Sheryl Dr
College Dr

Peak Hour

Date: 05/12/2015
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	4.1%	0.70
WB	1.3%	0.75
NB	3.1%	0.84
SB	2.0%	0.68
TOTAL	2.1%	0.77



Two-Hour Count Summaries

Interval Start		College Dr Eastbound				College Dr Westbound				Allen Dr Northbound				Sheryl Dr Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	1	20	0	4	2	11	0	0	0	0	26	0	5	1	1	71	0
7:15 AM		0	0	20	1	2	4	37	1	0	4	0	21	0	18	0	0	108	0
7:30 AM		**0**	**0**	**31**	**0**	**2**	**5**	**58**	**1**	**0**	**0**	**0**	**28**	**0**	**18**	**1**	**0**	**144**	0
7:45 AM		**0**	**2**	**40**	**1**	**0**	**9**	**137**	**1**	**0**	**3**	**0**	**26**	**0**	**36**	**0**	**1**	**256**	579
8:00 AM		**0**	**0**	**60**	**0**	**2**	**6**	**146**	**3**	**0**	**5**	**0**	**19**	**0**	**30**	**0**	**2**	**273**	781
8:15 AM		**0**	**0**	**33**	**2**	**1**	**6**	**90**	**7**	**0**	**2**	**0**	**14**	**0**	**12**	**0**	**0**	**167**	**840**
8:30 AM		0	0	32	1	1	3	59	1	0	0	0	19	0	7	1	0	124	820
8:45 AM		0	0	34	2	0	4	86	2	0	0	0	18	0	14	0	2	162	726
Count Total		0	3	270	7	12	39	624	16	0	14	0	171	0	140	3	6	1,305	0
Peak Hour	**All**	**0**	**2**	**164**	**3**	**5**	**26**	**431**	**12**	**0**	**10**	**0**	**87**	**0**	**96**	**1**	**3**	**840**	**0**
	HV	**0**	**0**	**5**	**2**	**0**	**1**	**5**	**0**	**0**	**2**	**0**	**1**	**0**	**2**	**0**	**0**	**18**	**0**
	HV%	**-**	**0%**	**3%**	**67%**	**0%**	**4%**	**1%**	**0%**	**-**	**20%**	**-**	**1%**	**-**	**2%**	**0%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	2	2	0	0	*4*	0	0	0	0	*0*	0	1	0	1	*2*
7:15 AM	3	3	2	0	*8*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**1**	**2**	**0**	**0**	***3***	**1**	**0**	**0**	**0**	***1***	**1**	**0**	**1**	**0**	*2*
7:45 AM	**2**	**1**	**1**	**2**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**3**	**0**	**3**	*6*
8:00 AM	**2**	**1**	**1**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**2**	**2**	**1**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**1**	**2**	***5***
8:30 AM	3	2	0	0	*5*	0	1	0	0	*1*	0	1	0	1	*2*
8:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	1	2	1	1	*5*
Count Total	15	13	5	2	*35*	1	1	0	0	*2*	2	9	3	8	*22*
Peak Hour	**7**	**6**	**3**	**2**	***18***	**1**	**0**	**0**	**0**	***1***	**1**	**5**	**2**	**5**	***13***

Deon Fouche: 415 - 757 - 7714 Deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	College Dr Eastbound				College Dr Westbound				Allen Dr Northbound				Sheryl Dr Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0
7:15 AM	0	0	2	1	0	0	2	1	0	2	0	0	0	0	0	0	8	0
7:30 AM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	0
7:45 AM	**0**	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**6**	21
8:00 AM	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	21
8:15 AM	**0**	**0**	**1**	**1**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**18**
8:30 AM	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5	20
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Count Total	0	0	12	3	0	1	11	1	0	4	0	1	0	2	0	0	35	0
Peak Hour	**0**	**0**	**5**	**2**	**0**	**1**	**5**	**0**	**0**	**2**	**0**	**1**	**0**	**2**	**0**	**0**	**18**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	College Dr Eastbound			College Dr Westbound			Allen Dr Northbound			Sheryl Dr Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	1	0	0	1	0	0	0	0	0	0	0	2	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

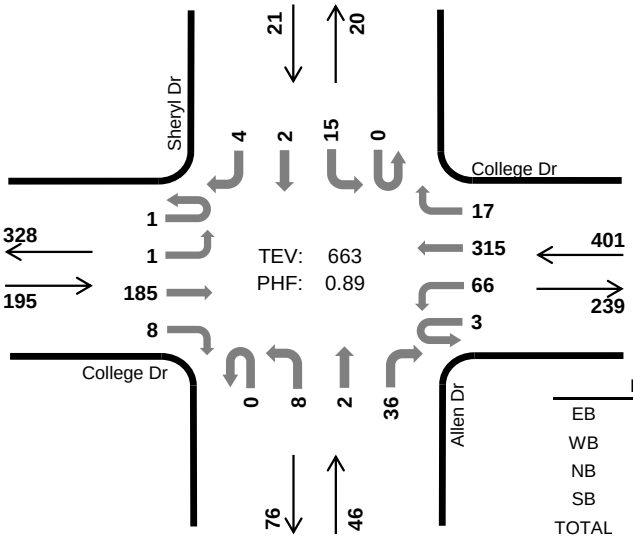
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

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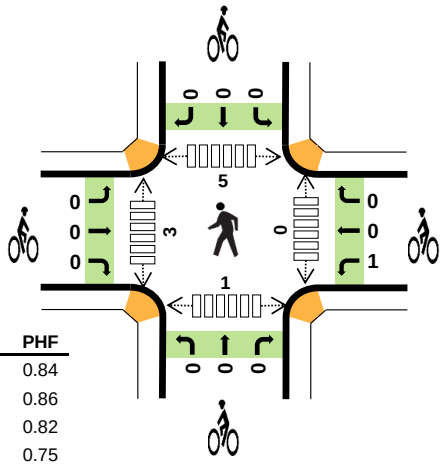
Sheryl Dr
College Dr

Peak Hour

Date: 05/12/2015
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	2.1%	0.84
WB	0.8%	0.86
NB	4.3%	0.82
SB	0.0%	0.75
TOTAL	1.4%	0.89



Two-Hour Count Summaries

Interval Start	College Dr Eastbound				College Dr Westbound				Allen Dr Northbound				Sheryl Dr Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	52	0	0	7	48	6	0	1	0	11	0	2	0	2	130	0
4:15 PM	0	1	39	3	2	20	47	1	0	0	0	4	0	7	3	1	128	0
4:30 PM	0	1	58	3	0	20	38	4	0	3	2	12	0	7	2	0	150	0
4:45 PM	0	0	49	1	2	9	61	7	0	0	2	7	0	8	0	1	147	555
5:00 PM	**0**	**1**	**55**	**2**	**0**	**9**	**65**	**4**	**0**	**3**	**0**	**6**	**0**	**6**	**0**	**1**	**152**	577
5:15 PM	**0**	**0**	**34**	**3**	**2**	**17**	**73**	**3**	**0**	**2**	**0**	**12**	**0**	**4**	**1**	**0**	**151**	600
5:30 PM	**1**	**0**	**40**	**2**	**1**	**22**	**83**	**6**	**0**	**3**	**0**	**11**	**0**	**3**	**0**	**2**	**174**	624
5:45 PM	**0**	**0**	**56**	**1**	**0**	**18**	**94**	**4**	**0**	**0**	**2**	**7**	**0**	**2**	**1**	**1**	**186**	**663**
Count Total	1	4	383	15	7	122	509	35	0	12	6	70	0	39	7	8	1,218	0
Peak Hour All	**1**	**1**	**185**	**8**	**3**	**66**	**315**	**17**	**0**	**8**	**2**	**36**	**0**	**15**	**2**	**4**	**663**	**0**
Peak Hour HV	**0**	**0**	**2**	**2**	**0**	**0**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**
Peak Hour HV%	**0%**	**0%**	**1%**	**25%**	**0%**	**0%**	**1%**	**0%**	**-**	**25%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	2	1	0	*4*	0	0	0	0	*0*	1	0	1	0	*2*
4:15 PM	2	1	0	0	*3*	0	0	0	0	*0*	0	1	4	0	*5*
4:30 PM	0	1	2	0	*3*	0	0	0	0	*0*	0	0	3	0	*3*
4:45 PM	2	0	0	0	*2*	0	1	0	0	*1*	0	0	0	0	*0*
5:00 PM	**0**	**1**	**1**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**2**	**0**	*3*
5:15 PM	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**1**	*2*
5:30 PM	**0**	**2**	**1**	**0**	***3***	**0**	**1**	**0**	**0**	***1***	**0**	**1**	**2**	**0**	*3*
5:45 PM	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***
Count Total	9	7	5	0	*21*	0	2	0	0	*2*	1	4	13	1	*19*
Peak Hour	**4**	**3**	**2**	**0**	***9***	**0**	**1**	**0**	**0**	***1***	**0**	**3**	**5**	**1**	***9***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	College Dr Eastbound				College Dr Westbound				Allen Dr Northbound				Sheryl Dr Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	2	0	0	1	0	0	0	0	0	0	4	0
4:15 PM	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	3	0
4:30 PM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	3	0
4:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	12
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	10
5:15 PM	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	9
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	9
5:45 PM	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**9**
Count Total	0	0	5	4	0	1	6	0	0	4	0	1	0	0	0	0	21	0
Peak Hour	**0**	**0**	**2**	**2**	**0**	**0**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	College Dr Eastbound			College Dr Westbound			Allen Dr Northbound			Sheryl Dr Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:30 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Count Total	0	0	0	1	1	0	0	0	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

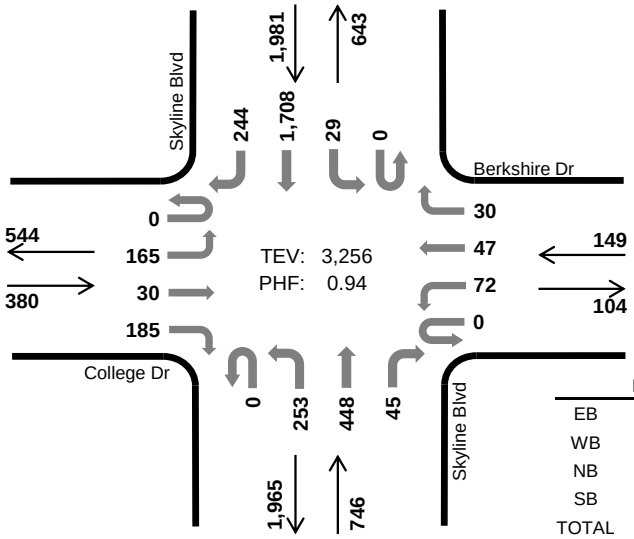
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

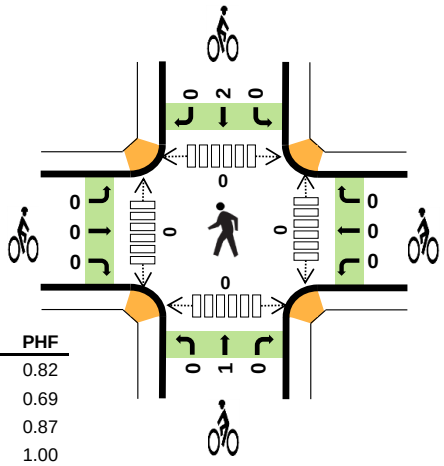
Deon Fouche: 415 - 757 - 7714 Deon.fouche@idaxdata.com

Skyline Blvd
Berkshire Dr

Date: 05/12/2015
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM

Peak Hour





	HV %:	PHF
EB	2.9%	0.82
WB	0.7%	0.69
NB	0.9%	0.87
SB	1.0%	1.00
TOTAL	1.2%	0.94

Two-Hour Count Summaries

Interval Start		College Dr Eastbound				Berkshire Dr Westbound				Skyline Blvd Northbound				Skyline Blvd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	26	4	47	0	12	2	5	0	8	58	0	0	2	375	14	553	0
7:15 AM		0	31	5	47	0	13	4	3	0	23	76	4	0	8	377	26	617	0
7:30 AM		0	32	15	51	0	15	5	3	0	39	97	6	0	4	399	41	707	0
7:45 AM		**0**	**44**	**7**	**47**	**0**	**22**	**12**	**4**	**0**	**73**	**130**	**12**	**0**	**7**	**403**	**86**	**847**	2,724
8:00 AM		**0**	**46**	**10**	**60**	**0**	**25**	**17**	**12**	**0**	**89**	**94**	**15**	**0**	**12**	**417**	**65**	**862**	3,033
8:15 AM		**0**	**37**	**10**	**52**	**0**	**13**	**16**	**7**	**0**	**53**	**111**	**10**	**0**	**2**	**437**	**56**	**804**	3,220
8:30 AM		**0**	**38**	**3**	**26**	**0**	**12**	**2**	**7**	**0**	**38**	**113**	**8**	**0**	**8**	**451**	**37**	**743**	**3,256**
8:45 AM		0	37	4	35	0	17	8	7	0	54	102	9	2	5	314	42	636	3,045
Count Total		0	291	58	365	0	129	66	48	0	377	781	64	2	48	3,173	367	5,769	0
Peak Hour	**All**	**0**	**165**	**30**	**185**	**0**	**72**	**47**	**30**	**0**	**253**	**448**	**45**	**0**	**29**	**1,708**	**244**	**3,256**	**0**
	HV	**0**	**6**	**1**	**4**	**0**	**1**	**0**	**0**	**0**	**3**	**4**	**0**	**0**	**1**	**13**	**5**	**38**	**0**
	HV%	**-**	**4%**	**3%**	**2%**	**-**	**1%**	**0%**	**0%**	**-**	**1%**	**1%**	**0%**	**-**	**3%**	**1%**	**2%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	2	0	3	4	*9*	1	0	0	3	*4*	0	0	0	1	*1*
7:15 AM	2	0	6	3	*11*	0	0	0	4	*4*	0	0	0	0	*0*
7:30 AM	2	0	1	2	*5*	0	0	0	4	*4*	0	0	0	1	*1*
7:45 AM	**4**	**0**	**2**	**3**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**2**	**0**	**1**	**4**	***7***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**1**	**0**	**2**	**4**	***7***	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	*0*
8:30 AM	**4**	**1**	**2**	**8**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:45 AM	0	0	2	3	*5*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	17	1	19	31	*68*	1	0	1	13	*15*	0	0	0	2	*2*
Peak Hour	**11**	**1**	**7**	**19**	***38***	**0**	**0**	**1**	**2**	***3***	**0**	**0**	**0**	**0**	***0***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	College Dr				Berkshire Dr				Skyline Blvd				Skyline Blvd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	1	0	0	0	0	0	1	2	0	0	0	3	1	9	0
7:15 AM	0	2	0	0	0	0	0	0	0	2	4	0	0	1	0	2	11	0
7:30 AM	0	2	0	0	0	0	0	0	0	1	0	0	0	0	1	1	5	0
7:45 AM	**0**	**3**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**1**	**9**	34
8:00 AM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**1**	**7**	32
8:15 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**3**	**1**	**7**	28
8:30 AM	**0**	**2**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**5**	**2**	**15**	**38**
8:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5	34
Count Total	0	11	1	5	0	1	0	0	0	7	12	0	0	2	20	9	68	0
Peak Hour	**0**	**6**	**1**	**4**	**0**	**1**	**0**	**0**	**0**	**3**	**4**	**0**	**0**	**1**	**13**	**5**	**38**	**0**

Two-Hour Count Summaries - Bikes

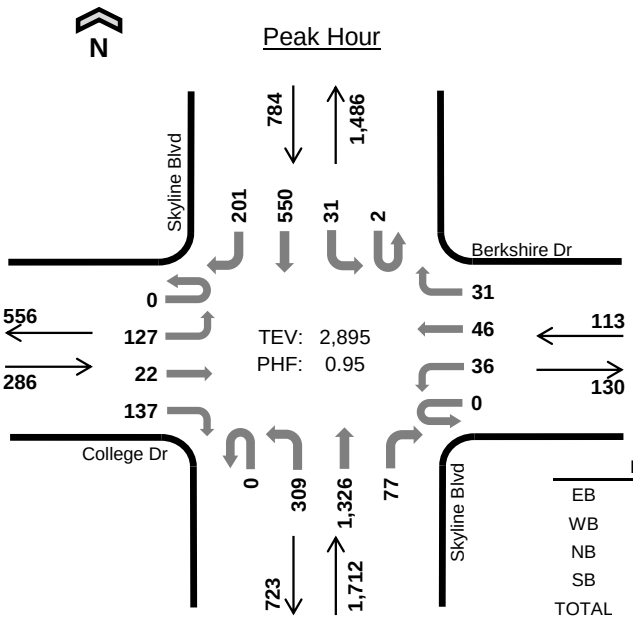
Interval Start	College Dr			Berkshire Dr			Skyline Blvd			Skyline Blvd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	0	0	0	0	3	0	4	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	4	0	4	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	4	0	4	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	12
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	9
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**2**	7
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	0	1	0	0	0	0	1	0	0	13	0	15	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**3**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

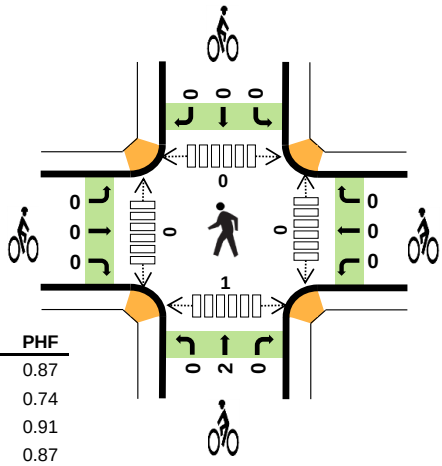
Deon Fouche: 415 - 757 - 7714 Deon.fouche@idaxdata.com

Skyline Blvd
Berkshire Dr

Date: 05/12/2015
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.7%	0.87
WB	0.9%	0.74
NB	0.2%	0.91
SB	0.8%	0.87
TOTAL	0.4%	0.95



Two-Hour Count Summaries

Interval Start		College Dr Eastbound				Berkshire Dr Westbound				Skyline Blvd Northbound				Skyline Blvd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	34	10	33	0	4	10	7	0	49	222	17	0	8	122	26	542	0
4:15 PM		0	36	4	28	0	6	9	8	0	48	256	17	1	7	110	37	567	0
4:30 PM		0	34	9	41	0	8	5	7	0	61	293	17	0	9	104	29	617	0
4:45 PM		0	31	4	39	0	18	8	8	0	58	318	17	0	6	130	37	674	2,400
5:00 PM		**0**	**30**	**4**	**36**	**0**	**9**	**9**	**8**	**0**	**57**	**326**	**19**	**1**	**6**	**127**	**32**	**664**	2,522
5:15 PM		**0**	**27**	**8**	**32**	**0**	**4**	**10**	**6**	**0**	**95**	**321**	**19**	**0**	**7**	**156**	**45**	**730**	2,685
5:30 PM		**0**	**30**	**4**	**33**	**0**	**13**	**17**	**8**	**0**	**81**	**368**	**19**	**1**	**6**	**132**	**46**	**758**	2,826
5:45 PM		**0**	**40**	**6**	**36**	**0**	**10**	**10**	**9**	**0**	**76**	**311**	**20**	**0**	**12**	**135**	**78**	**743**	**2,895**
Count Total		0	262	49	278	0	72	78	61	0	525	2,415	145	3	61	1,016	330	5,295	0
Peak Hour	**All**	**0**	**127**	**22**	**137**	**0**	**36**	**46**	**31**	**0**	**309**	**1,326**	**77**	**2**	**31**	**550**	**201**	**2,895**	**0**
	HV	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**2**	**0**	**0**	**0**	**2**	**4**	**12**	**0**
	HV%	**-**	**2%**	**0%**	**0%**	**-**	**0%**	**0%**	**3%**	**-**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**2%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	1	2	4	*7*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	2	0	1	2	*5*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	1	0	0	2	*3*	1	0	0	0	*1*	0	0	0	0	*0*
4:45 PM	1	0	3	1	*5*	0	0	1	0	*1*	0	0	0	1	*1*
5:00 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**1**	**0**	**1**	**3**	***5***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**1**	*1*
5:30 PM	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:45 PM	**1**	**1**	**2**	**0**	***4***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***
Count Total	6	2	9	15	*32*	1	0	3	0	*4*	0	0	0	2	*2*
Peak Hour	**2**	**1**	**3**	**6**	***12***	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**0**	**1**	***1***

Deon Fouche: 415 - 757 - 7714 Deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	College Dr				Berkshire Dr				Skyline Blvd				Skyline Blvd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	3	1	7	0
4:15 PM	0	2	0	0	0	0	0	0	0	0	1	0	0	0	1	1	5	0
4:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	3	0
4:45 PM	0	1	0	0	0	0	0	0	0	1	1	1	0	0	1	0	5	20
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	14
5:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**1**	**5**	14
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**	13
5:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**4**	**12**
Count Total	0	5	0	1	0	0	1	1	0	3	5	1	0	0	8	7	32	0
Peak Hour	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**2**	**0**	**0**	**0**	**2**	**4**	**12**	**0**

Two-Hour Count Summaries - Bikes

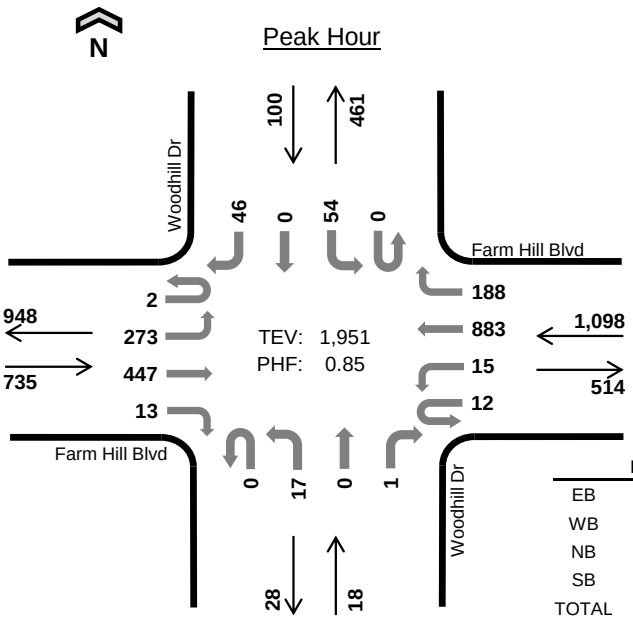
Interval Start	College Dr			Berkshire Dr			Skyline Blvd			Skyline Blvd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	1	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	3
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**2**
Count Total	1	0	0	0	0	0	1	2	0	0	0	0	4	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

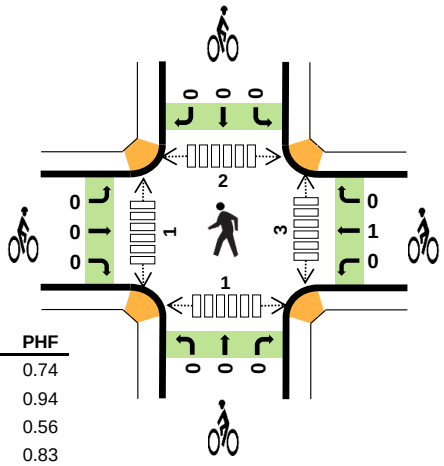
Deon Fouche: 415 - 757 - 7714 Deon.fouche@idaxdata.com

Woodhill Dr
Farm Hill Blvd

Date: 05/12/2015
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	1.4%	0.74
WB	1.0%	0.94
NB	0.0%	0.56
SB	6.0%	0.83
TOTAL	1.4%	0.85



Two-Hour Count Summaries

Interval Start		Farm Hill Blvd Eastbound				Farm Hill Blvd Westbound				Woodhill Dr Northbound				Woodhill Dr Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		1	13	50	0	3	0	135	6	0	2	0	0	0	6	0	14	230	0
7:15 AM		0	16	86	0	1	1	206	6	0	8	0	2	0	4	0	11	341	0
7:30 AM		**0**	**27**	**67**	**2**	**4**	**2**	**242**	**16**	**0**	**3**	**0**	**0**	**0**	**8**	**0**	**10**	**381**	0
7:45 AM		**1**	**67**	**121**	**4**	**2**	**3**	**219**	**43**	**0**	**8**	**0**	**0**	**0**	**11**	**0**	**13**	**492**	1,444
8:00 AM		**0**	**109**	**137**	**3**	**2**	**3**	**217**	**71**	**0**	**3**	**0**	**1**	**0**	**19**	**0**	**9**	**574**	1,788
8:15 AM		**1**	**70**	**122**	**4**	**4**	**7**	**205**	**58**	**0**	**3**	**0**	**0**	**0**	**16**	**0**	**14**	**504**	**1,951**
8:30 AM		0	48	98	3	3	3	163	28	0	8	0	0	0	7	0	13	374	1,944
8:45 AM		0	51	108	3	3	0	134	14	0	5	0	0	0	8	0	8	334	1,786
Count Total		3	401	789	19	22	19	1,521	242	0	40	0	3	0	79	0	92	3,230	0
Peak Hour	**All**	**2**	**273**	**447**	**13**	**12**	**15**	**883**	**188**	**0**	**17**	**0**	**1**	**0**	**54**	**0**	**46**	**1,951**	**0**
	HV	**1**	**5**	**4**	**0**	**0**	**0**	**5**	**6**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**2**	**27**	**0**
	HV%	**50%**	**2%**	**1%**	**0%**	**0%**	**0%**	**1%**	**3%**	**-**	**0%**	**-**	**0%**	**-**	**7%**	**-**	**4%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	1	0	2	*4*	0	0	0	0	*0*	1	0	1	1	*3*
7:15 AM	3	0	0	1	*4*	0	0	0	0	*0*	1	0	0	1	*2*
7:30 AM	**0**	**3**	**0**	**1**	***4***	**0**	**1**	**0**	**0**	***1***	**1**	**1**	**0**	**0**	*2*
7:45 AM	**5**	**1**	**0**	**1**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	*2*
8:00 AM	**4**	**3**	**0**	**2**	***9***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**1**	*2*
8:15 AM	**1**	**4**	**0**	**2**	***7***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***
8:30 AM	1	1	0	1	*3*	0	0	0	0	*0*	1	0	0	1	*2*
8:45 AM	1	7	0	0	*8*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	16	20	0	10	*46*	0	1	0	0	*1*	6	1	3	4	*14*
Peak Hour	**10**	**11**	**0**	**6**	***27***	**0**	**1**	**0**	**0**	***1***	**3**	**1**	**2**	**1**	***7***

Deon Fouche: 415 - 757 - 7714 Deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Farm Hill Blvd				Farm Hill Blvd				Woodhill Dr				Woodhill Dr				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2	4	0
7:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	4	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**	0
7:45 AM	**1**	**1**	**3**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**7**	19
8:00 AM	**0**	**4**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**9**	24
8:15 AM	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**7**	**27**
8:30 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	3	26
8:45 AM	0	1	0	0	0	0	6	1	0	0	0	0	0	0	0	0	8	27
Count Total	1	7	8	0	0	0	12	8	0	0	0	0	0	6	0	4	46	0
Peak Hour	**1**	**5**	**4**	**0**	**0**	**0**	**5**	**6**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**2**	**27**	**0**

Two-Hour Count Summaries - Bikes

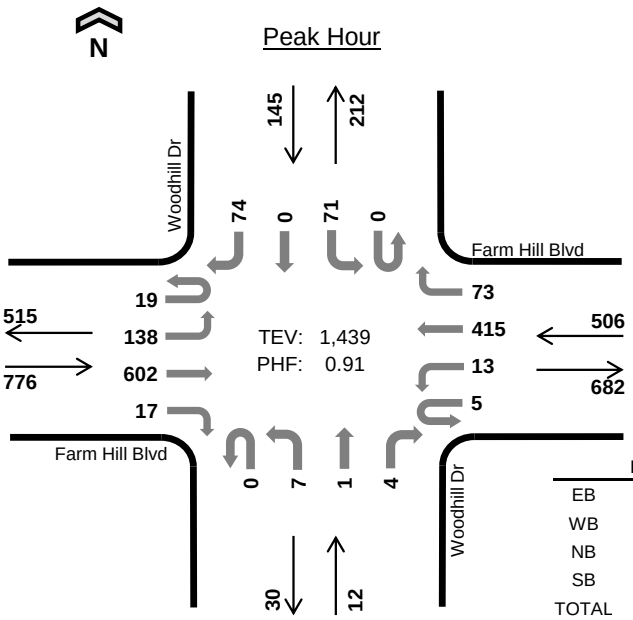
Interval Start	Farm Hill Blvd			Farm Hill Blvd			Woodhill Dr			Woodhill Dr			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

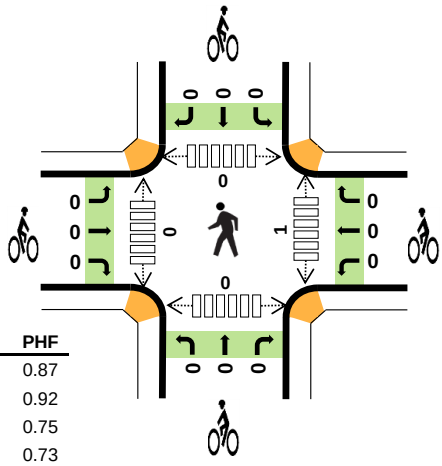
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 Deon.fouche@idaxdata.com

Woodhill Dr
Farm Hill Blvd

Date: 05/12/2015
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM





	HV %:	PHF
EB	0.0%	0.87
WB	0.6%	0.92
NB	0.0%	0.75
SB	1.4%	0.73
TOTAL	0.3%	0.91

Two-Hour Count Summaries

Interval Start		Farm Hill Blvd Eastbound				Farm Hill Blvd Westbound				Woodhill Dr Northbound				Woodhill Dr Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		5	26	100	2	1	4	95	12	0	3	0	0	0	18	1	18	285	0
4:15 PM		1	17	131	5	4	1	80	11	0	0	1	0	0	19	0	24	294	0
4:30 PM		0	25	145	5	1	2	92	15	0	1	0	0	0	16	0	21	323	0
4:45 PM		3	20	151	4	0	6	91	17	0	1	0	0	0	19	0	25	337	1,239
5:00 PM		**0**	**20**	**133**	**4**	**1**	**3**	**101**	**8**	**0**	**2**	**0**	**2**	**0**	**27**	**0**	**23**	**324**	1,278
5:15 PM		**9**	**32**	**139**	**3**	**2**	**4**	**108**	**18**	**0**	**1**	**0**	**1**	**0**	**18**	**0**	**12**	**347**	1,331
5:30 PM		**9**	**43**	**156**	**5**	**0**	**4**	**98**	**21**	**0**	**2**	**1**	**1**	**0**	**12**	**0**	**19**	**371**	1,379
5:45 PM		**1**	**43**	**174**	**5**	**2**	**2**	**108**	**26**	**0**	**2**	**0**	**0**	**0**	**14**	**0**	**20**	**397**	**1,439**
Count Total		28	226	1,129	33	11	26	773	128	0	12	2	4	0	143	1	162	2,678	0
Peak Hour	**All**	**19**	**138**	**602**	**17**	**5**	**13**	**415**	**73**	**0**	**7**	**1**	**4**	**0**	**71**	**0**	**74**	**1,439**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**5**	**0**
	HV%	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**3%**	**-**	**0%**	**0%**	**0%**	**-**	**3%**	**-**	**0%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	1	3	0	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	1	2	0	1	*4*	0	0	0	0	*0*	1	0	0	0	*1*
4:30 PM	0	1	0	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	1	1	0	2	*4*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
5:15 PM	**0**	**2**	**0**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:45 PM	**0**	**1**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Count Total	3	10	0	6	*19*	0	0	0	0	*0*	2	0	0	0	*2*
Peak Hour	**0**	**3**	**0**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***

Deon Fouche: 415 - 757 - 7714 Deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Farm Hill Blvd				Farm Hill Blvd				Woodhill Dr				Woodhill Dr				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	4	0
4:15 PM	0	0	1	0	0	0	1	1	0	0	0	0	0	1	0	0	4	0
4:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2	0
4:45 PM	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	1	4	14
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	10
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	9
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	7
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**5**
Count Total	0	1	2	0	0	1	5	4	0	0	0	0	0	5	0	1	19	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**5**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Farm Hill Blvd			Farm Hill Blvd			Woodhill Dr			Woodhill Dr			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

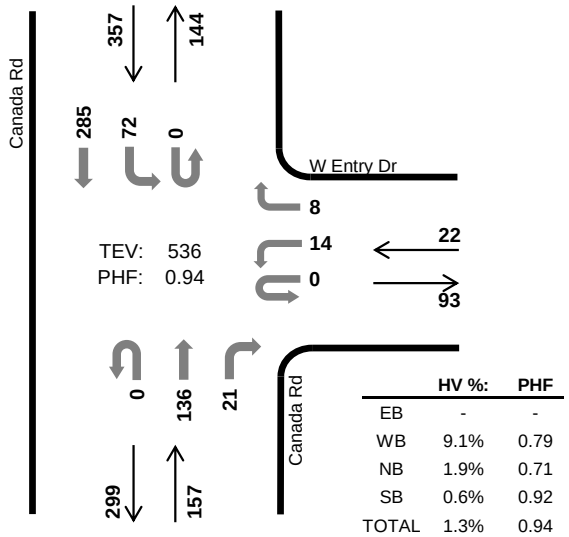
Deon Fouche: 415 - 757 - 7714 Deon.fouche@idaxdata.com

Canada Rd
W Entry Dr

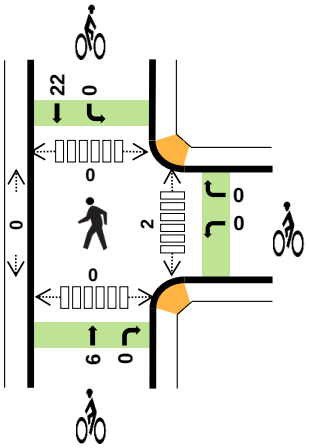
Date: 05/12/2015
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

N

Peak Hour



	HV %:	PHF
EB	-	-
WB	9.1%	0.79
NB	1.9%	0.71
SB	0.6%	0.92
TOTAL	1.3%	0.94



Two-Hour Count Summaries

Interval Start		0 Eastbound				W Entry Dr Westbound				Canada Rd Northbound				Canada Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	0	0	0	1	0	1	0	0	17	4	0	3	32	0	58	0
7:15 AM		0	0	0	0	0	0	0	1	0	0	30	2	0	6	40	0	79	0
7:30 AM		**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**0**	**0**	**31**	**3**	**0**	**12**	**71**	**0**	**121**	0
7:45 AM		**0**	**0**	**0**	**0**	**0**	**3**	**0**	**2**	**0**	**0**	**25**	**4**	**0**	**25**	**72**	**0**	**131**	389
8:00 AM		**0**	**0**	**0**	**0**	**0**	**5**	**0**	**2**	**0**	**0**	**31**	**8**	**0**	**24**	**71**	**0**	**141**	472
8:15 AM		**0**	**0**	**0**	**0**	**0**	**4**	**0**	**2**	**0**	**0**	**49**	**6**	**0**	**11**	**71**	**0**	**143**	**536**
8:30 AM		0	0	0	0	0	6	0	4	0	0	47	4	0	15	42	0	118	533
8:45 AM		0	0	0	0	0	5	0	3	0	0	24	6	0	9	47	0	94	496
Count Total		0	0	0	0	0	26	0	17	0	0	254	37	0	105	446	0	885	0
Peak Hour	**All**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**8**	**0**	**0**	**136**	**21**	**0**	**72**	**285**	**0**	**536**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**7**	**0**
	HV%	**-**	**-**	**-**	**-**	**-**	**14%**	**-**	**0%**	**-**	**-**	**2%**	**0%**	**-**	**0%**	**1%**	**-**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	0	*0*	0	0	0	6	*6*	0	0	0	0	*0*
7:15 AM	0	0	1	0	*1*	0	0	1	2	*3*	1	0	1	0	*2*
7:30 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**3**	***4***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**0**	**1**	**2**	***3***	**0**	**0**	**1**	**7**	***8***	**1**	**0**	**0**	**0**	*1*
8:00 AM	**0**	**2**	**1**	**0**	***3***	**0**	**0**	**1**	**6**	***7***	**1**	**0**	**0**	**0**	*1*
8:15 AM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**3**	**6**	***9***	**0**	**0**	**0**	**0**	***0***
8:30 AM	0	0	2	0	*2*	0	0	2	3	*5*	1	0	0	0	*1*
8:45 AM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	2	6	4	*12*	0	0	9	33	*42*	4	0	1	0	*5*
Peak Hr	**0**	**2**	**3**	**2**	***7***	**0**	**0**	**6**	**22**	***28***	**2**	**0**	**0**	**0**	***2***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	0				W Entry Dr				Canada Rd				Canada Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**3**	4
8:00 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	7
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**7**
8:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	9
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	8
Count Total	0	0	0	0	0	2	0	0	0	0	6	0	0	0	4	0	12	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**7**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	0			W Entry Dr			Canada Rd			Canada Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	6	0	6	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	2	0	3	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	**0**	**4**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**7**	**0**	**8**	21
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**6**	**0**	**7**	22
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**6**	**0**	**9**	**28**
8:30 AM	0	0	0	0	0	0	0	2	0	0	3	0	5	29
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	21
Count Total	0	0	0	0	0	0	0	9	0	0	33	0	42	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**22**	**0**	**28**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

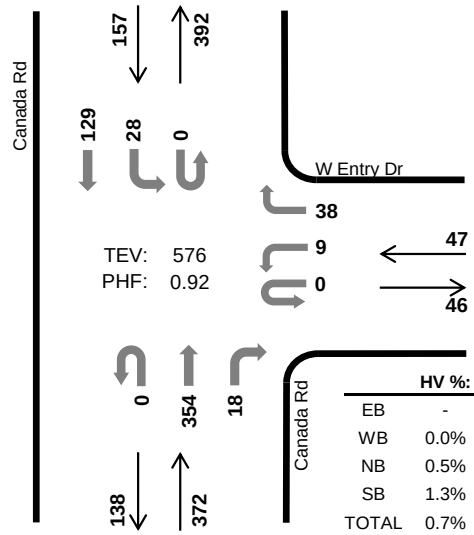
Deon Fouche: 415 - 757 - 7714 Deon.fouche@idaxdata.com

Canada Rd
W Entry Dr

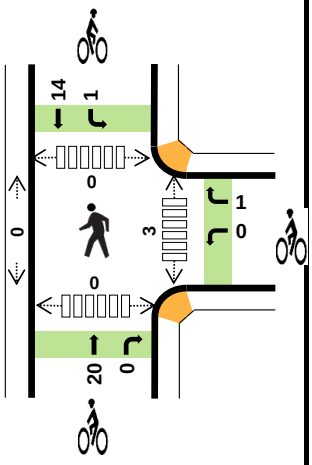
Date: 05/12/2015
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM

N

Peak Hour



	HV %:	PHF
EB	-	-
WB	0.0%	0.73
NB	0.5%	0.93
SB	1.3%	0.89
TOTAL	0.7%	0.92



Two-Hour Count Summaries

Interval Start	0 Eastbound				W Entry Dr Westbound				Canada Rd Northbound				Canada Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	1	0	9	0	0	57	6	0	3	23	0	99	0
4:15 PM	0	0	0	0	0	6	0	3	0	0	57	3	0	5	35	0	109	0
4:30 PM	0	0	0	0	0	6	0	11	0	0	63	6	0	2	28	0	116	0
4:45 PM	0	0	0	0	0	2	0	12	0	0	69	6	0	6	33	0	128	452
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**0**	**82**	**7**	**0**	**4**	**29**	**0**	**134**	487
5:15 PM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**8**	**0**	**0**	**92**	**4**	**0**	**9**	**31**	**0**	**147**	525
5:30 PM	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**12**	**0**	**0**	**96**	**4**	**0**	**8**	**32**	**0**	**156**	565
5:45 PM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**6**	**0**	**0**	**84**	**3**	**0**	**7**	**37**	**0**	**139**	**576**
Count Total	0	0	0	0	0	24	0	73	0	0	600	39	0	44	248	0	1,028	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**38**	**0**	**0**	**354**	**18**	**0**	**28**	**129**	**0**	**576**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**4**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**-**	**-**	**1%**	**0%**	**-**	**0%**	**2%**	**-**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	0	1	*1*	0	0	2	9	*11*	0	0	0	0	*0*
4:15 PM	0	0	0	1	*1*	0	0	3	5	*8*	0	0	0	0	*0*
4:30 PM	0	0	2	0	*2*	0	0	2	3	*5*	0	0	0	0	*0*
4:45 PM	0	0	1	0	*1*	0	0	2	2	*4*	0	0	0	0	*0*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**3**	**0**	***3***	**1**	**0**	**0**	**0**	*1*
5:15 PM	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**5**	**3**	***8***	**1**	**0**	**0**	**0**	*1*
5:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**6**	**6**	***13***	**1**	**0**	**0**	**0**	*1*
5:45 PM	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**6**	**6**	***12***	**0**	**0**	**0**	**0**	***0***
Count Total	0	0	5	4	*9*	0	1	29	34	*64*	3	0	0	0	*3*
Peak Hr	**0**	**0**	**2**	**2**	***4***	**0**	**1**	**20**	**15**	***36***	**3**	**0**	**0**	**0**	***3***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	0				W Entry Dr				Canada Rd				Canada Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	5
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	5
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**4**
Count Total	0	0	0	0	0	0	0	0	0	0	4	1	0	0	4	0	9	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**4**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	0			W Entry Dr			Canada Rd			Canada Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	2	0	0	9	0	11	0
4:15 PM	0	0	0	0	0	0	0	3	0	0	5	0	8	0
4:30 PM	0	0	0	0	0	0	0	2	0	0	3	0	5	0
4:45 PM	0	0	0	0	0	0	0	2	0	0	2	0	4	28
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	20
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**1**	**2**	**0**	**8**	20
5:30 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**6**	**0**	**0**	**6**	**0**	**13**	28
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**6**	**0**	**12**	**36**
Count Total	0	0	0	0	0	1	0	29	0	1	33	0	64	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**20**	**0**	**1**	**14**	**0**	**36**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 Deon.fouche@idaxdata.com

Traffic Volumes

Intersection Number: 1
Traffix Node Number: 1
Intersection Name: Farm Hill Boulevard & Woodhill Drive
Peak Hour: AM
Count Date: 05/12/15

Date of Analysis: 07/06/15

Annual Growth Rate 1%
Existing Year 2015
Cumulative Year 2019

Scenario	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	216	883	27	1	0	17	13	447	316	53	0	62	*2035*
Proposed Project Trips	**26**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**27**	**16**	**0**	**15**	***85***
Existing + Project Conditions	242	883	27	1	1	17	13	447	343	69	0	77	*2120*
Cumlative Growth	9	36	1	0	0	1	1	18	13	2	0	3	*84*
Cumlative No Project Conditions	225	919	28	1	0	18	14	465	329	55	0	65	*2119*
Cumulative + Project Conditions	251	919	28	1	1	18	14	465	356	71	0	80	*2204*

Intersection Number: 2
Traffix Node Number: 2
Intersection Name: Canada Road & West Entry Drive
Peak Hour: AM
Count Date: 05/12/15

Date of Analysis: 07/06/15

Annual Growth Rate 1%
Existing Year 2015
Cumulative Year 2019

Scenario	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	0	285	83	9	0	16	24	136	0	0	0	0	*553*
Proposed Project Trips	**0**	**0**	**9**	**5**	**0**	**5**	**9**	**0**	**0**	**0**	**0**	**0**	***28***
Existing + Project Conditions	0	285	92	14	0	21	33	136	0	0	0	0	*581*
Cumlative Growth	0	12	3	0	0	1	1	6	0	0	0	0	*23*
Cumlative No Project Conditions	0	297	86	9	0	17	25	142	0	0	0	0	*576*
Cumulative + Project Conditions	0	297	95	14	0	22	34	142	0	0	0	0	*604*

Intersection Number: 3
Traffix Node Number: 3
Intersection Name: Sheryl Drive & College Drive
Peak Hour: AM
Count Date: 05/12/15

Date of Analysis: 07/06/15

Annual Growth Rate 1%
Existing Year 2015
Cumulative Year 2021

	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
Scenario	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	3	1	96	12	490	31	87	0	11	3	187	2	*923*
Proposed Project Trips	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**31**	**0**	***41***
Existing + Project Conditions	3	1	96	12	500	31	87	0	11	3	218	2	*964*
Cumlative Growth	0	0	6	1	30	2	5	0	1	0	12	0	*57*
Cumlative No Project Conditions	3	1	102	13	520	33	92	0	12	3	199	2	*980*
Cumulative + Project Conditions	3	1	102	13	530	33	92	0	12	3	230	2	*1021*

Intersection Number: 4
Traffix Node Number: 4
Intersection Name: Skyline Boulevard & College Drive
Peak Hour: AM
Count Date: 05/12/15

Date of Analysis: 07/06/15

Annual Growth Rate 1%
Existing Year 2015
Cumulative Year 2021

	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
Scenario	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	270	1708	29	30	52	72	45	448	280	196	32	175	*3337*
Proposed Project Trips	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**18**	**0**	**13**	***41***
Existing + Project Conditions	274	1708	29	30	52	72	45	448	286	214	32	188	*3378*
Cumlative Growth	17	105	2	2	3	4	3	28	17	12	2	11	*206*
Cumlative No Project Conditions	287	1813	31	32	55	76	48	476	297	208	34	186	*3543*
Cumulative + Project Conditions	291	1813	31	32	55	76	48	476	303	226	34	199	*3584*

Intersection Number: 1
Traffix Node Number: 1
Intersection Name: Farm Hill Boulevard & Woodhill Drive
Peak Hour: PM
Count Date: 05/12/15

Date of Analysis: 07/06/15

Annual Growth Rate 1%
Existing Year 2015
Cumulative Year 2019

	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
Scenario	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	84	415	18	4	1	7	17	602	180	85	0	82	*1495*
Proposed Project Trips	**27**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**29**	**21**	**1**	**20**	***99***
Existing + Project Conditions	111	415	18	4	2	7	17	602	209	106	1	102	*1594*
Cumlative Growth	3	17	1	0	0	0	1	24	7	3	0	3	*59*
Cumlative No Project Conditions	87	432	19	4	1	7	18	626	187	88	0	85	*1554*
Cumulative + Project Conditions	114	432	19	4	2	7	18	626	216	109	1	105	*1653*

Intersection Number: 2
Traffix Node Number: 2
Intersection Name: Canada Road & West Entry Drive
Peak Hour: PM
Count Date: 05/12/15

Date of Analysis: 07/06/15

Annual Growth Rate 1%
Existing Year 2015
Cumulative Year 2019

	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
Scenario	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	0	129	32	44	0	10	21	354	0	0	0	0	*590*
Proposed Project Trips	**0**	**0**	**10**	**7**	**0**	**7**	**9**	**0**	**0**	**0**	**0**	**0**	***33***
Existing + Project Conditions	0	129	42	51	0	17	30	354	0	0	0	0	*623*
Cumlative Growth	0	5	1	2	0	0	1	14	0	0	0	0	*23*
Cumlative No Project Conditions	0	134	33	46	0	10	22	368	0	0	0	0	*613*
Cumulative + Project Conditions	0	134	43	53	0	17	31	368	0	0	0	0	*646*

Intersection Number: 3
Traffix Node Number: 3
Intersection Name: Sheryl Drive & College Drive
Peak Hour: PM
Count Date: 05/12/15

Date of Analysis: 07/06/15

Annual Growth Rate 1%
Existing Year 2015
Cumulative Year 2021

	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
Scenario	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	5	2	15	17	358	69	36	2	9	9	211	2	*735*
Proposed Project Trips	**0**	**0**	**0**	**0**	**35**	**0**	**0**	**0**	**0**	**0**	**19**	**0**	***54***
Existing + Project Conditions	5	2	15	17	393	69	36	2	9	9	230	2	*789*
Cumlative Growth	0	0	1	1	22	4	2	0	1	1	13	0	*45*
Cumlative No Project Conditions	5	2	16	18	380	73	38	2	10	10	224	2	*780*
Cumulative + Project Conditions	5	2	16	18	415	73	38	2	10	10	243	2	*834*

Intersection Number: 4
Traffix Node Number: 4
Intersection Name: Skyline Boulevard & College Drive
Peak Hour: PM
Count Date: 05/12/15

Date of Analysis: 07/06/15

Annual Growth Rate 1%
Existing Year 2015
Cumulative Year 2021

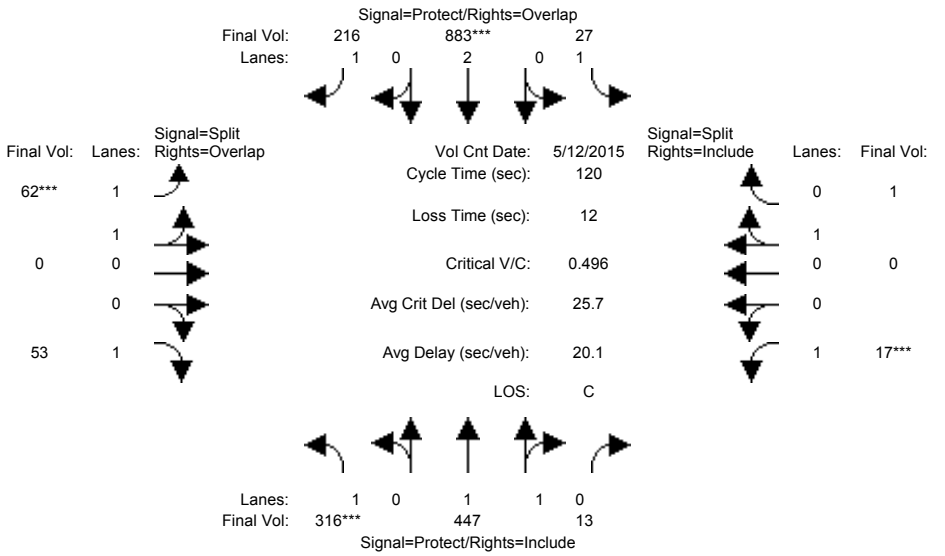
	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
Scenario	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	217	550	33	31	50	36	77	1326	333	149	24	139	*2965*
Proposed Project Trips	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20**	**11**	**0**	**8**	***54***
Existing + Project Conditions	232	550	33	31	50	36	77	1326	353	160	24	147	*3019*
Cumlative Growth	13	34	2	2	3	2	5	82	20	9	1	9	*182*
Cumlative No Project Conditions	230	584	35	33	53	38	82	1408	353	158	25	148	*3147*
Cumulative + Project Conditions	245	584	35	33	53	38	82	1408	373	169	25	156	*3201*

LOS Calculations

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex AM

Intersection #1: Woodhill Drive & Farm Hill Boulevard [Canada College]



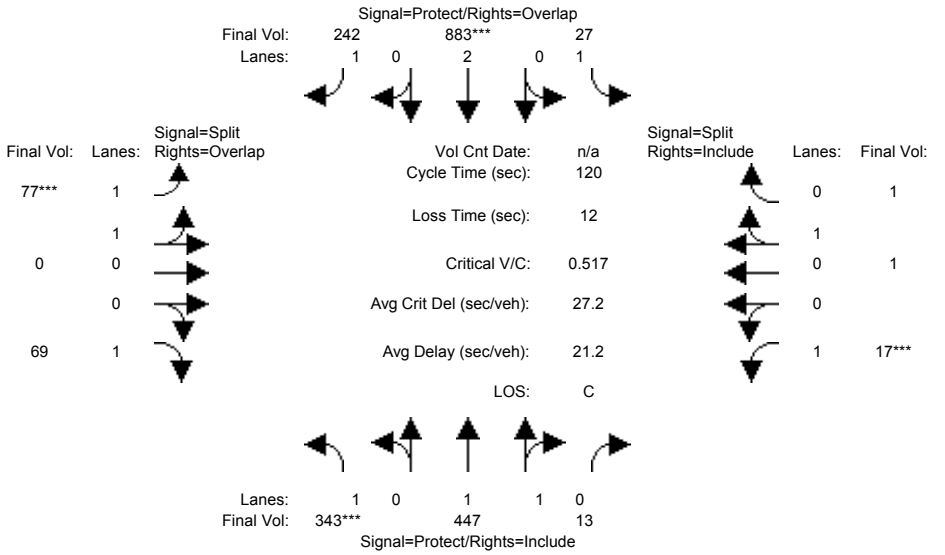

```
Street Name:      Farm Hill Boulevard              Woodhill Drive
Approach:     North Bound     South Bound      East Bound      West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Y+R:         4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 May 2015 << 7:30 - 8:30 am
Base Vol:     316  447   13   27  883  216   62   0   53   17   0    1
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:  316  447   13   27  883  216   62   0   53   17   0    1
Added Vol:      0    0    0    0    0    0    0    0    0    0    0    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:  316  447   13   27  883  216   62   0   53   17   0    1
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   316  447   13   27  883  216   62   0   53   17   0    1
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  316  447   13   27  883  216   62   0   53   17   0    1
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume:  316  447   13   27  883  216   62   0   53   17   0    1
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.95 0.95 0.95 0.95 0.95 0.85 0.95 1.00 0.85 0.95 1.00 0.85
Lanes:       1.00 1.94 0.06 1.00 2.00 1.00 2.00 0.00 1.00 1.00 0.00 1.00
Final Sat.:  1805 3494  102 1805 3610 1615 3618    0 1615 1805    0 1615
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.18 0.13 0.13 0.01 0.24 0.13 0.02 0.00 0.03 0.01 0.00 0.00
Crit Moves:  ****              ****       ****           ****
Green/Cycle: 0.35 0.76 0.76 0.09 0.49 0.53 0.03 0.00 0.39 0.02 0.00 0.02
Volume/Cap:  0.50 0.17 0.17 0.17 0.50 0.25 0.50 0.00 0.08 0.50 0.00 0.03
Delay/Veh:   31.0  4.1  4.1 51.1 20.6 15.6 60.0  0.0 23.3 69.1  0.0 58.2
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  31.0  4.1  4.1 51.1 20.6 15.6 60.0  0.0 23.3 69.1  0.0 58.2
LOS by Move:    C    A    A    D    C    B    E    A    C    E    A    E
HCM2k95thQ:    17    5    5    2   21    8    4    0    2    3    0    0
Note: Queue reported is the number of cars per lane.
```


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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex+Proj AM

Intersection #1: Woodhill Drive & Farm Hill Boulevard [Canada College]



Street Name:	Farm Hill Boulevard						Woodhill Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:AM Peak Hour												
Base Vol:	343	447	13	27	883	242	77	0	69	17	1	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	343	447	13	27	883	242	77	0	69	17	1	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	343	447	13	27	883	242	77	0	69	17	1	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	343	447	13	27	883	242	77	0	69	17	1	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	343	447	13	27	883	242	77	0	69	17	1	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	343	447	13	27	883	242	77	0	69	17	1	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	1.00	0.85	0.95	0.93	0.93
Lanes:	1.00	1.94	0.06	1.00	2.00	1.00	2.00	0.00	1.00	1.00	0.50	0.50
Final Sat.:	1805	3494	102	1805	3610	1615	3618	0	1615	1805	879	879
Capacity Analysis Module:												
Vol/Sat:	0.19	0.13	0.13	0.01	0.24	0.15	0.02	0.00	0.04	0.01	0.00	0.00
Crit Moves:	****			****			****			****		
Green/Cycle:	0.37	0.75	0.75	0.09	0.47	0.51	0.04	0.00	0.41	0.02	0.02	0.02
Volume/Cap:	0.52	0.17	0.17	0.17	0.52	0.29	0.52	0.00	0.10	0.52	0.06	0.06
Delay/Veh:	30.3	4.2	4.2	51.2	22.3	16.8	59.5	0.0	22.0	72.0	58.7	58.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.3	4.2	4.2	51.2	22.3	16.8	59.5	0.0	22.0	72.0	58.7	58.7
LOS by Move:	C	A	A	D	C	B	E	A	C	E	E	E
HCM2k95thQ:	18	5	5	2	21	10	4	0	3	3	0	0

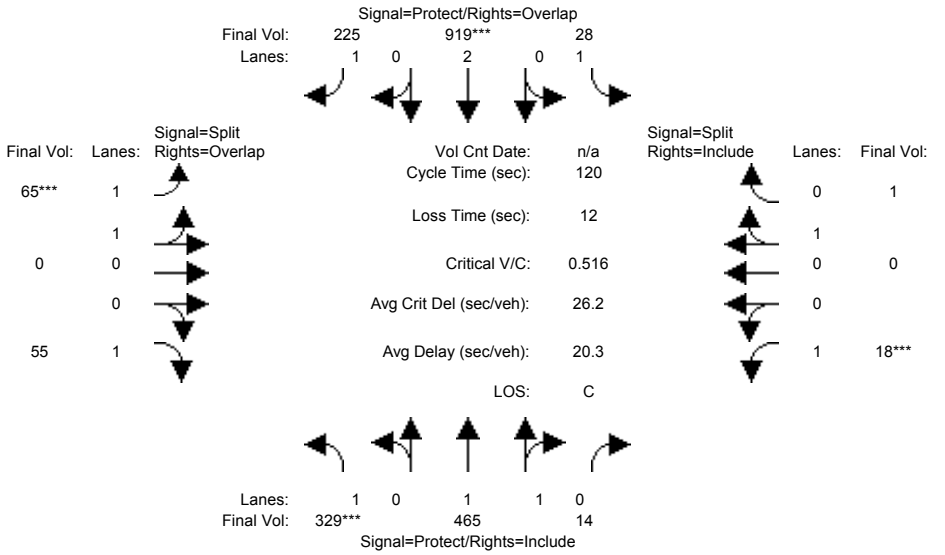
Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum AM

Intersection #1: Woodhill Drive & Farm Hill Boulevard [Canada College]



Street Name:	Farm Hill Boulevard						Woodhill Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:AM Peak Hour												
Base Vol:	329	465	14	28	919	225	65	0	55	18	0	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	329	465	14	28	919	225	65	0	55	18	0	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	329	465	14	28	919	225	65	0	55	18	0	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	329	465	14	28	919	225	65	0	55	18	0	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	329	465	14	28	919	225	65	0	55	18	0	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	329	465	14	28	919	225	65	0	55	18	0	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.00	1.94	0.06	1.00	2.00	1.00	2.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1805	3490	105	1805	3610	1615	3618	0	1615	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.18	0.13	0.13	0.02	0.25	0.14	0.02	0.00	0.03	0.01	0.00	0.00
Crit Moves:	****			****			****			****		
Green/Cycle:	0.35	0.76	0.76	0.09	0.49	0.53	0.03	0.00	0.39	0.02	0.00	0.02
Volume/Cap:	0.52	0.18	0.18	0.18	0.52	0.26	0.52	0.00	0.09	0.52	0.00	0.03
Delay/Veh:	31.5	4.1	4.1	51.2	21.0	15.7	60.6	0.0	23.3	71.1	0.0	58.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.5	4.1	4.1	51.2	21.0	15.7	60.6	0.0	23.3	71.1	0.0	58.2
LOS by Move:	C	A	A	D	C	B	E	A	C	E	A	E
HCM2k95thQ:	18	5	5	2	22	9	4	0	3	3	0	0

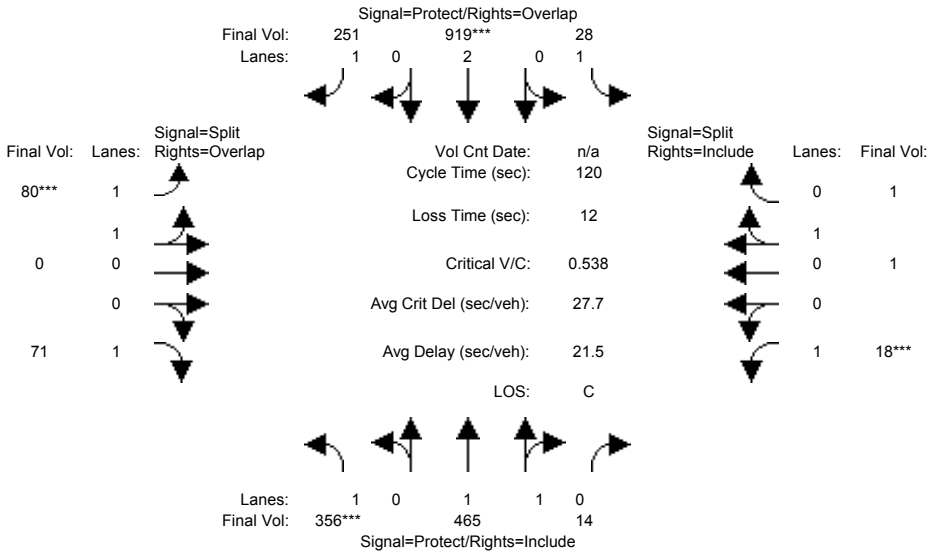
Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+Proj AM

Intersection #1: Woodhill Drive & Farm Hill Boulevard [Canada College]



Street Name:	Farm Hill Boulevard						Woodhill Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:AM Peak Hour												
Base Vol:	356	465	14	28	919	251	80	0	71	18	1	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	356	465	14	28	919	251	80	0	71	18	1	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	356	465	14	28	919	251	80	0	71	18	1	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	356	465	14	28	919	251	80	0	71	18	1	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	356	465	14	28	919	251	80	0	71	18	1	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	356	465	14	28	919	251	80	0	71	18	1	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	1.00	0.85	0.95	0.93	0.93
Lanes:	1.00	1.94	0.06	1.00	2.00	1.00	2.00	0.00	1.00	1.00	0.50	0.50
Final Sat.:	1805	3490	105	1805	3610	1615	3618	0	1615	1805	879	879
Capacity Analysis Module:												
Vol/Sat:	0.20	0.13	0.13	0.02	0.25	0.16	0.02	0.00	0.04	0.01	0.00	0.00
Crit Moves:	****			****			****			****		
Green/Cycle:	0.37	0.75	0.75	0.09	0.47	0.51	0.04	0.00	0.41	0.02	0.02	0.02
Volume/Cap:	0.54	0.18	0.18	0.18	0.54	0.30	0.54	0.00	0.11	0.54	0.06	0.06
Delay/Veh:	30.8	4.3	4.3	51.3	22.7	16.9	60.3	0.0	22.1	74.6	58.7	58.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.8	4.3	4.3	51.3	22.7	16.9	60.3	0.0	22.1	74.6	58.7	58.7
LOS by Move:	C	A	A	D	C	B	E	A	C	E	E	E
HCM2k95thQ:	19	5	5	2	23	10	5	0	3	3	0	0

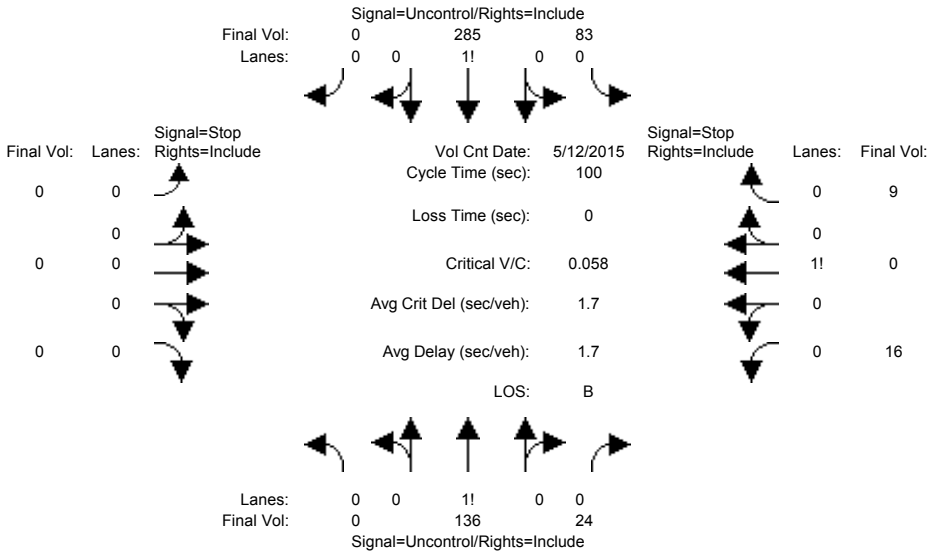
Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex AM

Intersection #2: Canada Road & West Entry Drive [Canada College]




```
Street Name:          Canada Road                    West Entry Drive
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 May 2015 << 7:30 - 8:30 am
Base Vol:       0  136   24   83  285    0    0    0    0   16    0    9
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00 1.00  1.00 1.00
Initial Bse:    0  136   24   83  285    0    0    0    0   16    0    9
Added Vol:      0    0    0    0    0    0    0    0    0    0    0    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:    0  136   24   83  285    0    0    0    0   16    0    9
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00 1.00  1.00 1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00 1.00  1.00 1.00
PHF Volume:     0  136   24   83  285    0    0    0    0   16    0    9
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
FinalVolume:    0  136   24   83  285    0    0    0    0   16    0    9
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   160 xxxx xxxxx  xxxx xxxx xxxxx   599  599   148
Potent Cap.: xxxx xxxx xxxxx  1432 xxxx xxxxx  xxxx xxxx xxxxx   468  418   904
Move Cap.:   xxxx xxxx xxxxx  1432 xxxx xxxxx  xxxx xxxx xxxxx   446  393   904
Volume/Cap:  xxxx xxxx  xxxx  0.06 xxxx  xxxx  xxxx xxxx  xxxx  0.04 0.00  0.01
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   0.2 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.7 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     A    *     *    *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx  546 xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.2 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.1 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx   7.7 xxxx xxxxx xxxxx xxxx xxxxx xxxxx 11.9 xxxxx
Shared LOS:     *    *     *     A    *     *    *    *     *     *    B     *
ApproachDel:    xxxxxx          xxxxxx          xxxxxx          11.9
ApproachLOS:         *               *               *          B
Note: Queue reported is the number of cars per lane.
                  Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #2 Canada Road & West Entry Drive
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound     South Bound      East Bound      West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Uncontrolled    Uncontrolled     Stop Sign       Stop Sign
Lanes:       0  0  0  1  0   0  1  0  0  0   0  0  0  0  0   0  0  1! 0  0
Initial Vol:    0  136   24   83  285    0    0    0    0   16    0    9
ApproachDel:   xxxxxx         xxxxxx         xxxxxx           11.9
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=25]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=553]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
             Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #2 Canada Road & West Entry Drive
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound     South Bound      East Bound      West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Uncontrolled    Uncontrolled     Stop Sign       Stop Sign
Lanes:       0  0  0  1  0   0  1  0  0  0   0  0  0  0  0   0  0  1! 0  0
Initial Vol:    0  136   24   83  285    0    0    0    0   16    0    9
------------|---------------||---------------||---------------||---------------|
Major Street Volume:           528
Minor Approach Volume:          25
Minor Approach Volume Threshold: 390
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
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signal warrant (such as the 4-hour or 8-hour warrants).

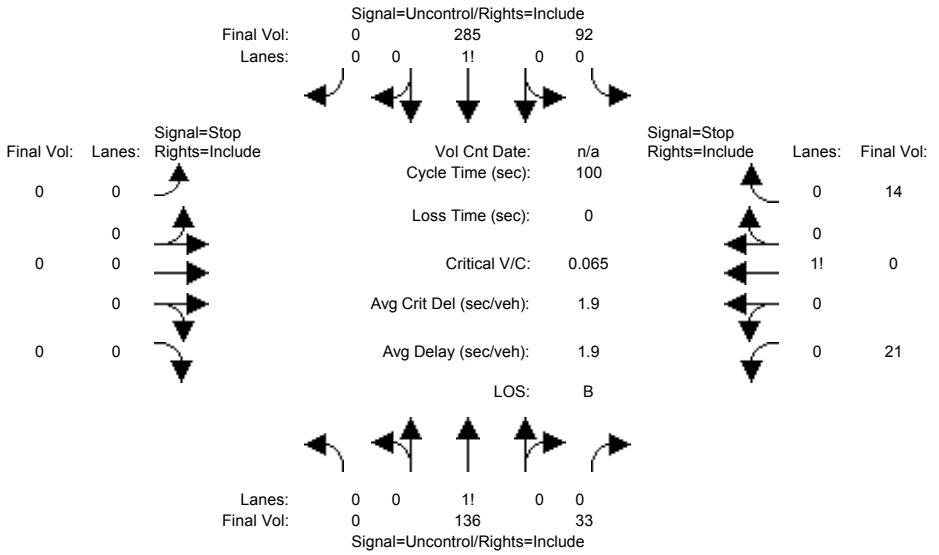
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```

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SMCCCD Facility Master Plan EIR
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Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex+Proj AM

Intersection #2: Canada Road & West Entry Drive [Canada College]




```
Street Name:          Canada Road                    West Entry Drive
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module:AM Peak Hour
Base Vol:       0  136   33    92  285    0     0    0    0    21    0    14
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0  136   33    92  285    0     0    0    0    21    0    14
Added Vol:      0    0    0     0    0    0     0    0    0     0    0     0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0     0
Initial Fut:    0  136   33    92  285    0     0    0    0    21    0    14
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0  136   33    92  285    0     0    0    0    21    0    14
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0     0
FinalVolume:    0  136   33    92  285    0     0    0    0    21    0    14
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   169 xxxx xxxxx  xxxx xxxx xxxxx   622  622   153
Potent Cap.: xxxx xxxx xxxxx  1421 xxxx xxxxx  xxxx xxxx xxxxx   454  406   899
Move Cap.:   xxxx xxxx xxxxx  1421 xxxx xxxxx  xxxx xxxx xxxxx   430  378   899
Volume/Cap:  xxxx xxxx  xxxx  0.06 xxxx  xxxx  xxxx xxxx  xxxx  0.05 0.00  0.02
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   0.2 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.7 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *    *     A    *    *    *    *    *    *    *    *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx  544 xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.2 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.2 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx   7.7 xxxx xxxxx xxxxx xxxx xxxxx xxxxx 12.1 xxxxx
Shared LOS:     *    *    *     A    *    *    *    *    *    *    B    *
ApproachDel:    xxxxxx          xxxxxx          xxxxxx          12.1
ApproachLOS:         *               *               *          B
Note: Queue reported is the number of cars per lane.
```

Peak Hour Delay Signal Warrant Report

```
********************************************************************************
Intersection #2 Canada Road & West Entry Drive
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound     South Bound      East Bound      West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Uncontrolled    Uncontrolled     Stop Sign       Stop Sign
Lanes:       0  0  0  1  0   0  1  0  0  0   0  0  0  0  0   0  0  1! 0  0
Initial Vol:    0  136   33   92  285    0    0    0    0   21    0   14
ApproachDel:   xxxxxx         xxxxxx         xxxxxx          12.1
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
  FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=35]
  FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=581]
  FAIL - Total volume less than 650 for intersection
       with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
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signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
            Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #2 Canada Road & West Entry Drive
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound     South Bound      East Bound      West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Uncontrolled    Uncontrolled     Stop Sign       Stop Sign
Lanes:       0  0  0  1  0   0  1  0  0  0   0  0  0  0  0   0  0  1! 0  0
Initial Vol:    0  136   33   92  285    0    0    0    0   21    0   14
------------|---------------||---------------||---------------||---------------|
Major Street Volume:           546
Minor Approach Volume:          35
Minor Approach Volume Threshold: 381
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
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signal warrant (such as the 4-hour or 8-hour warrants).

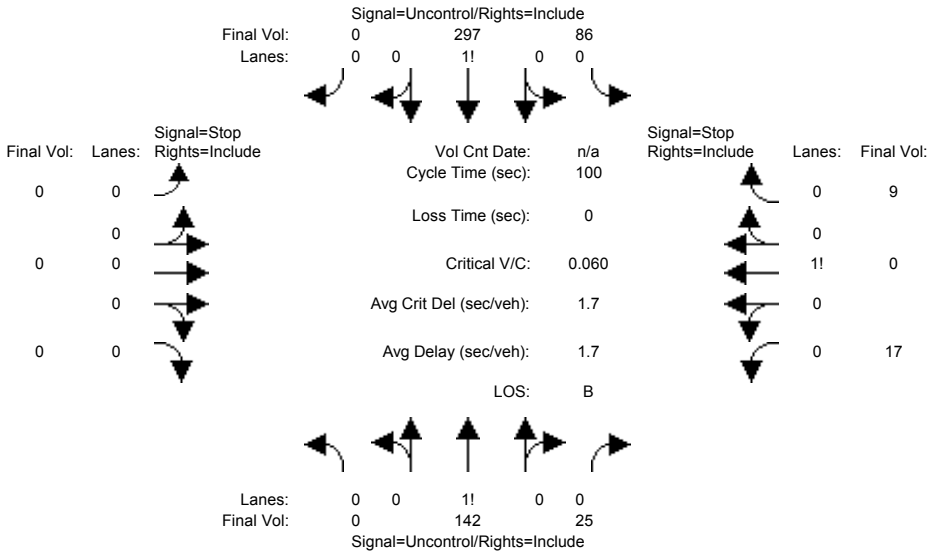
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```

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SMCCCD Facility Master Plan EIR
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Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cum AM

Intersection #2: Canada Road & West Entry Drive [Canada College]



Street Name:	Canada Road						West Entry Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:AM Peak Hour												
Base Vol:	0	142	25	86	297	0	0	0	0	17	0	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	142	25	86	297	0	0	0	0	17	0	9
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	142	25	86	297	0	0	0	0	17	0	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	142	25	86	297	0	0	0	0	17	0	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	142	25	86	297	0	0	0	0	17	0	9
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	167	xxxx	xxxxx	xxxx	xxxx	xxxxx	624	624	155
Potent Cap.:	xxxx	xxxx	xxxxx	1423	xxxx	xxxxx	xxxx	xxxx	xxxxx	453	405	897
Move Cap.:	xxxx	xxxx	xxxxx	1423	xxxx	xxxxx	xxxx	xxxx	xxxxx	431	379	897
Volume/Cap:	xxxx	xxxx	xxxx	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.01
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	525	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.2	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.2		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Canada Road & West Entry Drive

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Initial Vol:	0	142	25	86	297	0	0	0	0	17	0	9
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.2		

Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=26]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=576]
FAIL - Total volume less than 650 for intersection
with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Canada Road & West Entry Drive

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Initial Vol:	0	142	25	86	297	0	0	0	0	17	0	9

Major Street Volume: 550
Minor Approach Volume: 26
Minor Approach Volume Threshold: 379

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

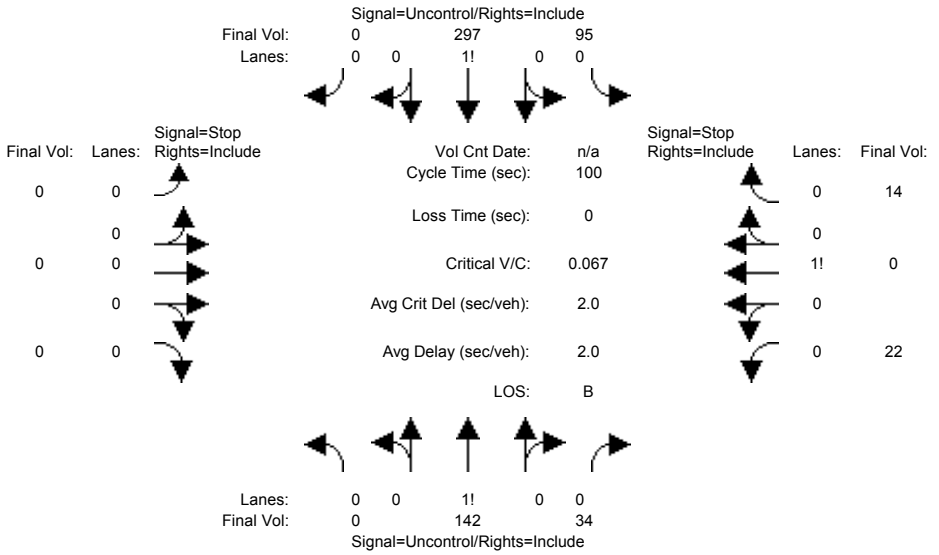
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SMCCCD Facility Master Plan EIR
Prepared by
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cum+Proj AM

Intersection #2: Canada Road & West Entry Drive [Canada College]




```
Street Name:          Canada Road                    West Entry Drive
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module:AM Peak Hour
Base Vol:       0  142   34    95  297    0     0    0     0    22    0    14
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  142   34    95  297    0     0    0     0    22    0    14
Added Vol:      0    0    0     0    0    0     0    0     0     0    0     0
PasserByVol:    0    0    0     0    0    0     0    0     0     0    0     0
Initial Fut:    0  142   34    95  297    0     0    0     0    22    0    14
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  142   34    95  297    0     0    0     0    22    0    14
Reduct Vol:     0    0    0     0    0    0     0    0     0     0    0     0
FinalVolume:    0  142   34    95  297    0     0    0     0    22    0    14
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   176 xxxx xxxxx  xxxx xxxx xxxxx   646  646   159
Potent Cap.: xxxx xxxx xxxxx  1412 xxxx xxxxx  xxxx xxxx xxxxx   439  393   892
Move Cap.:   xxxx xxxx xxxxx  1412 xxxx xxxxx  xxxx xxxx xxxxx   415  365   892
Volume/Cap:  xxxx xxxx  xxxx  0.07 xxxx  xxxx  xxxx xxxx  xxxx  0.05 0.00  0.02
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   0.2 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.7 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     A    *     *    *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx  524 xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.2 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.2 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx   7.7 xxxx xxxxx xxxxx xxxx xxxxx xxxxx 12.4 xxxxx
Shared LOS:     *    *     *     A    *     *    *    *     *     *    B     *
ApproachDel:    xxxxxx          xxxxxx          xxxxxx          12.4
ApproachLOS:         *               *               *          B
Note: Queue reported is the number of cars per lane.
                  Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #2 Canada Road & West Entry Drive
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Initial Vol:	0	142	34	95	297	0	0	0	0	22	0	14
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.4		

Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=36]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=604]
FAIL - Total volume less than 650 for intersection
with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Canada Road & West Entry Drive

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Initial Vol:	0	142	34	95	297	0	0	0	0	22	0	14

Major Street Volume: 568
Minor Approach Volume: 36
Minor Approach Volume Threshold: 370

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

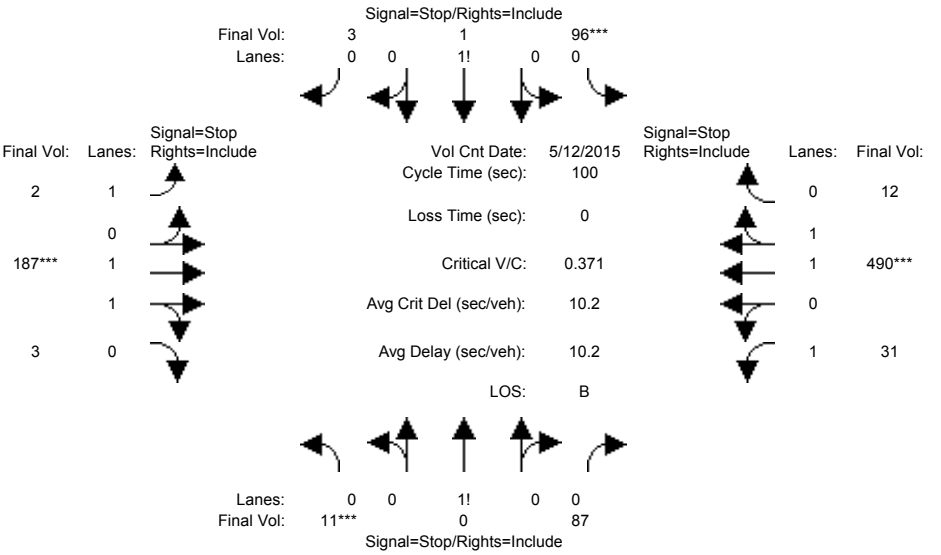
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Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex AM

Intersection #3: Sheryl Drive & College Drive [Skyline College]



Street Name:	Sheryl Drive						College Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 12 May 2015 << 7:30 - 8:30 am												
Base Vol:	11	0	87	96	1	3	2	187	3	31	490	12
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	0	87	96	1	3	2	187	3	31	490	12
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	0	87	96	1	3	2	187	3	31	490	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	0	87	96	1	3	2	187	3	31	490	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	0	87	96	1	3	2	187	3	31	490	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	0	87	96	1	3	2	187	3	31	490	12
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.11	0.00	0.89	0.96	0.01	0.03	1.00	1.97	0.03	1.00	1.95	0.05
Final Sat.:	73	0	578	559	6	17	569	1220	20	615	1321	32
Capacity Analysis Module:												
Vol/Sat:	0.15	xxxx	0.15	0.17	0.17	0.17	0.00	0.15	0.15	0.05	0.37	0.37
Crit Moves:	****			****			****			****		
Delay/Veh:	8.9	0.0	8.9	9.9	9.9	9.9	8.8	9.2	9.2	8.7	10.9	10.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.9	0.0	8.9	9.9	9.9	9.9	8.8	9.2	9.2	8.7	10.9	10.8
LOS by Move:	A	*	A	A	A	A	A	A	A	A	B	B
ApproachDel:	8.9			9.9			9.2			10.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.9			9.9			9.2			10.8		
LOS by Appr:	A			A			A			B		
AllWayAvgQ:	0.1	0.1	0.1	0.2	0.2	0.2	0.0	0.2	0.2	0.1	0.6	0.6

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #3 Sheryl Drive & College Drive

****

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Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Lanes:	0 0	1!	0 0	0 0	1!	0 0	1 0	1	1 0	1 0	1	1 0
Initial Vol:	11	0	87	96	1	3	2	187	3	31	490	12

Major Street Volume: 725
Minor Approach Volume: 100
Minor Approach Volume Threshold: 396

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

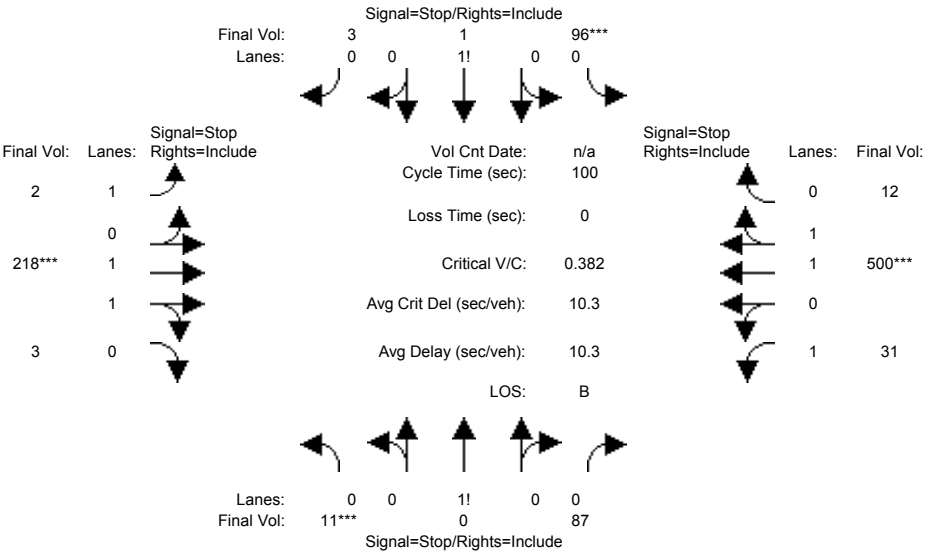
The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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SMCCCD Facility Master Plan EIR
Prepared by
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex+Proj AM

Intersection #3: Sheryl Drive & College Drive [Skyline College]




```
Street Name:          Sheryl Drive                College Drive
Approach:      North Bound     South Bound     East Bound      West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Min. Green:     0    0    0    0    0    0    0    0    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Volume Module:AM Peak Hour
Base Vol:      11    0   87   96    1    3    2  218    3   31  500   12
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   11    0   87   96    1    3    2  218    3   31  500   12
Added Vol:      0    0    0    0    0    0    0    0    0    0    0    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:   11    0   87   96    1    3    2  218    3   31  500   12
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    11    0   87   96    1    3    2  218    3   31  500   12
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   11    0   87   96    1    3    2  218    3   31  500   12
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume:   11    0   87   96    1    3    2  218    3   31  500   12
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:       0.11 0.00 0.89 0.96 0.01 0.03 1.00 1.97 0.03 1.00 1.95 0.05
Final Sat.:    72    0  567  550    6   17  566 1220   17  611 1310   32
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.15 xxxx 0.15 0.17 0.17 0.17 0.00 0.18 0.18 0.05 0.38 0.38
Crit Moves:  ****          ****               ****          ****
Delay/Veh:    9.0  0.0   9.0 10.0 10.0 10.0  8.8  9.5  9.5  8.8 11.1 11.1
Delay Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   9.0  0.0   9.0 10.0 10.0 10.0  8.8  9.5  9.5  8.8 11.1 11.1
LOS by Move:    A    *    A    A    A    A    A    A    A    A    B    B
ApproachDel:        9.0            10.0            9.5            11.0
Delay Adj:        1.00            1.00           1.00            1.00
ApprAdjDel:         9.0            10.0            9.5            11.0
LOS by Appr:          A              A              A              B
AllWayAvgQ:   0.2  0.2   0.2  0.2  0.2  0.2  0.0  0.2  0.2  0.1  0.6  0.6
Note: Queue reported is the number of cars per lane.
```

Peak Hour Volume Signal Warrant Report [Urban]

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******************************************************************************
Intersection #3 Sheryl Drive & College Drive
******************************************************************************
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Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1	1 0	1 0	1	1 0
Initial Vol:	11	0	87	96	1	3	2	218	3	31	500	12

Major Street Volume: 766
Minor Approach Volume: 100
Minor Approach Volume Threshold: 377

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

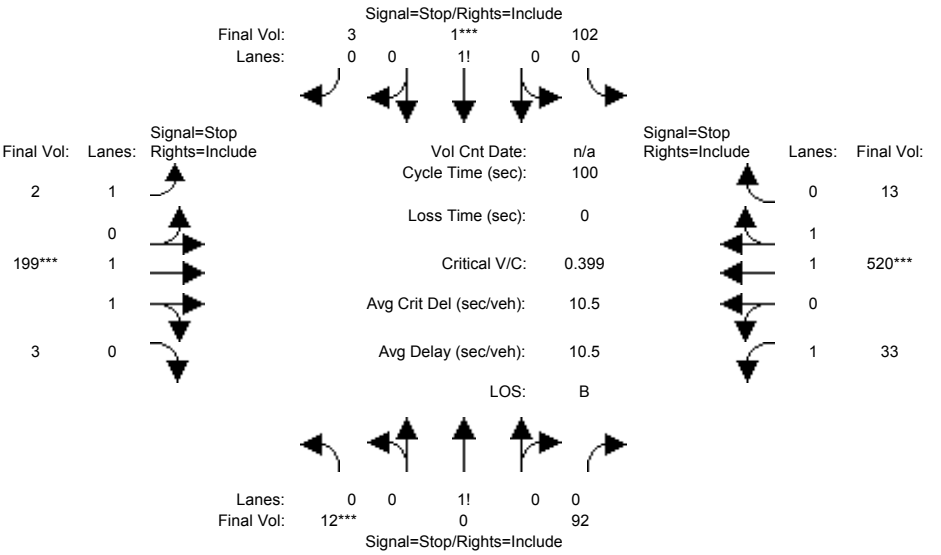
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SMCCCD Facility Master Plan EIR
Prepared by
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum AM

Intersection #3: Sheryl Drive & College Drive [Skyline College]




```
Street Name:          Sheryl Drive                College Drive
Approach:      North Bound     South Bound     East Bound      West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Min. Green:     0    0    0    0    0    0    0    0    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Volume Module:AM Peak Hour
Base Vol:      12    0   92  102    1    3    2  199    3   33  520   13
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   12    0   92  102    1    3    2  199    3   33  520   13
Added Vol:      0    0    0    0    0    0    0    0    0    0    0    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:   12    0   92  102    1    3    2  199    3   33  520   13
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    12    0   92  102    1    3    2  199    3   33  520   13
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   12    0   92  102    1    3    2  199    3   33  520   13
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume:   12    0   92  102    1    3    2  199    3   33  520   13
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:       0.12 0.00 0.88 0.96 0.01 0.03 1.00 1.97 0.03 1.00 1.95 0.05
Final Sat.:    74    0  564  551    5   16  559 1200   18  609 1305   33
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.16 xxxx 0.16 0.19 0.19 0.19 0.00 0.17 0.17 0.05 0.40 0.40
Crit Moves:  ****              ****           ****           ****
Delay/Veh:    9.1  0.0  9.1 10.1 10.1 10.1  8.9  9.4  9.4  8.8 11.4 11.3
Delay Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   9.1  0.0  9.1 10.1 10.1 10.1  8.9  9.4  9.4  8.8 11.4 11.3
LOS by Move:    A    *    A    B    B    B    A    A    A    A    B    B
ApproachDel:        9.1            10.1            9.4            11.2
Delay Adj:         1.00            1.00           1.00            1.00
ApprAdjDel:         9.1            10.1            9.4            11.2
LOS by Appr:          A              B              A              B
AllWayAvgQ:   0.2  0.2  0.2  0.2  0.2  0.2  0.0  0.2  0.2  0.1  0.6  0.6
Note: Queue reported is the number of cars per lane.
```

Peak Hour Volume Signal Warrant Report [Urban]

```
******************************************************************************
Intersection #3 Sheryl Drive & College Drive
******************************************************************************
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Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Lanes:	0 0	1!	0 0	0 0	1!	0 0	1 0	1	1 0	1 0	1	1 0
Initial Vol:	12	0	92	102	1	3	2	199	3	33	520	13

Major Street Volume: 770
Minor Approach Volume: 106
Minor Approach Volume Threshold: 375

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

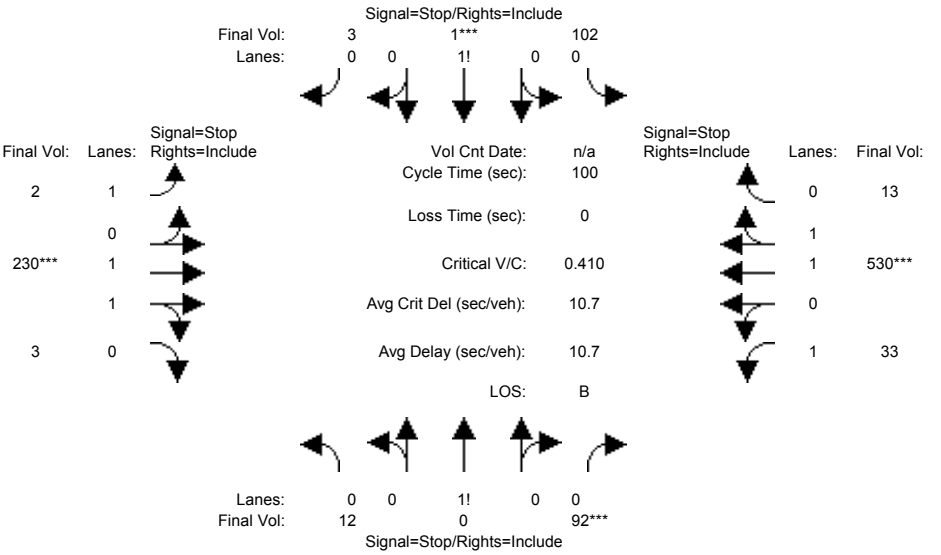
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SMCCCD Facility Master Plan EIR
Prepared by
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Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum+Proj AM

Intersection #3: Sheryl Drive & College Drive [Skyline College]




```
Street Name:          Sheryl Drive                College Drive
Approach:      North Bound     South Bound     East Bound      West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Min. Green:     0    0    0    0    0    0    0    0    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Volume Module:AM Peak Hour
Base Vol:      12    0   92  102    1    3    2  230    3   33  530   13
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   12    0   92  102    1    3    2  230    3   33  530   13
Added Vol:      0    0    0    0    0    0    0    0    0    0    0    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:   12    0   92  102    1    3    2  230    3   33  530   13
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    12    0   92  102    1    3    2  230    3   33  530   13
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   12    0   92  102    1    3    2  230    3   33  530   13
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume:   12    0   92  102    1    3    2  230    3   33  530   13
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:       0.12 0.00 0.88 0.96 0.01 0.03 1.00 1.97 0.03 1.00 1.95 0.05
Final Sat.:    72    0  554  542    5   16  558 1198   16  604 1294   32
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.17 xxxx 0.17 0.19 0.19 0.19 0.00 0.19 0.19 0.05 0.41 0.41
Crit Moves:           ****      ****           ****           ****
Delay/Veh:    9.3  0.0  9.3 10.2 10.2 10.2  8.9  9.7  9.7  8.9 11.6 11.5
Delay Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   9.3  0.0  9.3 10.2 10.2 10.2  8.9  9.7  9.7  8.9 11.6 11.5
LOS by Move:    A    *    A    B    B    B    A    A    A    A    B    B
ApproachDel:       9.3            10.2            9.7            11.4
Delay Adj:        1.00            1.00           1.00            1.00
ApprAdjDel:        9.3            10.2            9.7            11.4
LOS by Appr:         A              B              A              B
AllWayAvgQ:   0.2  0.2  0.2  0.2  0.2  0.2  0.0  0.2  0.2  0.1  0.7  0.6
Note: Queue reported is the number of cars per lane.
```

Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #3 Sheryl Drive & College Drive

****

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Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Lanes:	0 0	1!	0 0	0 0	1!	0 0	1 0	1	1 0	1 0	1	1 0
Initial Vol:	12	0	92	102	1	3	2	230	3	33	530	13

Major Street Volume: 811
Minor Approach Volume: 106
Minor Approach Volume Threshold: 357

SIGNAL WARRANT DISCLAIMER

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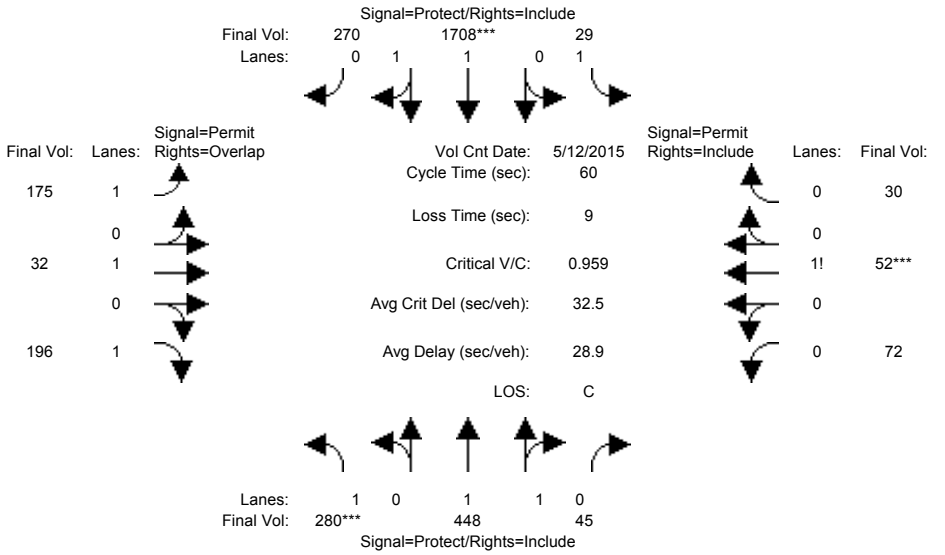
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SMCCCD Facility Master Plan EIR
Prepared by
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex AM

Intersection #4: Skyline Boulevard & College Drive [Skyline College]



Street Name:	Skyline Boulevard						College Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 12 May 2015 << 7:45 - 8:45 am												
Base Vol:	280	448	45	29	1708	270	175	32	196	72	52	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	448	45	29	1708	270	175	32	196	72	52	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	280	448	45	29	1708	270	175	32	196	72	52	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	280	448	45	29	1708	270	175	32	196	72	52	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	448	45	29	1708	270	175	32	196	72	52	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	280	448	45	29	1708	270	175	32	196	72	52	30
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.93	0.93	0.98	1.00	0.85	0.80	0.80	0.80
Lanes:	1.00	1.82	0.18	1.00	1.73	0.27	1.00	1.00	1.00	0.47	0.34	0.19
Final Sat.:	1805	3235	325	1805	3052	482	1870	1900	1615	715	516	298
Capacity Analysis Module:												
Vol/Sat:	0.16	0.14	0.14	0.02	0.56	0.56	0.09	0.02	0.12	0.10	0.10	0.10
Crit Moves:	****			****					****			
Green/Cycle:	0.16	0.67	0.67	0.08	0.58	0.58	0.11	0.11	0.27	0.11	0.11	0.11
Volume/Cap:	0.96	0.21	0.21	0.21	0.96	0.96	0.89	0.16	0.46	0.96	0.96	0.96
Delay/Veh:	66.6	3.9	3.9	26.7	23.6	23.6	62.4	24.8	19.1	85.5	85.5	85.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	66.6	3.9	3.9	26.7	23.6	23.6	62.4	24.8	19.1	85.5	85.5	85.5
LOS by Move:	E	A	A	C	C	C	E	C	B	F	F	F
HCM2k95thQ:	18	4	4	1	42	42	12	1	7	13	13	13

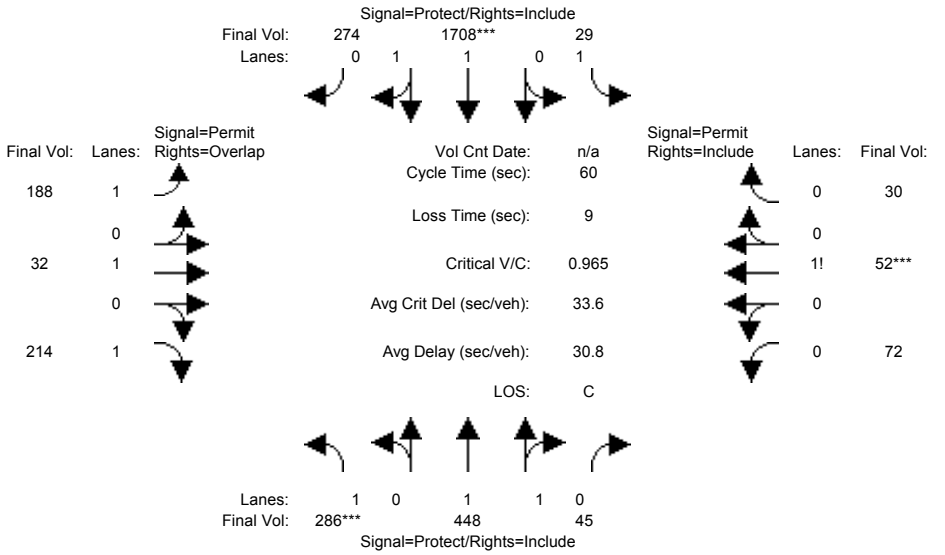
Note: Queue reported is the number of cars per lane.

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2000 HCM Operations (Future Volume Alternative)
Ex+Proj AM

Intersection #4: Skyline Boulevard & College Drive [Skyline College]



Street Name:	Skyline Boulevard						College Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: AM Peak Hour												
Base Vol:	286	448	45	29	1708	274	188	32	214	72	52	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	286	448	45	29	1708	274	188	32	214	72	52	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	286	448	45	29	1708	274	188	32	214	72	52	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	286	448	45	29	1708	274	188	32	214	72	52	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	286	448	45	29	1708	274	188	32	214	72	52	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	286	448	45	29	1708	274	188	32	214	72	52	30
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.93	0.93	0.99	1.00	0.85	0.80	0.80	0.80
Lanes:	1.00	1.82	0.18	1.00	1.72	0.28	1.00	1.00	1.00	0.47	0.34	0.19
Final Sat.:	1805	3235	325	1805	3046	489	1873	1900	1615	715	516	298
Capacity Analysis Module:												
Vol/Sat:	0.16	0.14	0.14	0.02	0.56	0.56	0.10	0.02	0.13	0.10	0.10	0.10
Crit Moves:	****			****					****			
Green/Cycle:	0.16	0.67	0.67	0.08	0.58	0.58	0.10	0.10	0.27	0.10	0.10	0.10
Volume/Cap:	0.96	0.21	0.21	0.21	0.96	0.96	0.96	0.16	0.49	0.96	0.96	0.96
Delay/Veh:	67.5	3.9	3.9	26.7	24.6	24.6	79.7	24.9	19.4	87.2	87.2	87.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	67.5	3.9	3.9	26.7	24.6	24.6	79.7	24.9	19.4	87.2	87.2	87.2
LOS by Move:	E	A	A	C	C	C	E	C	B	F	F	F
HCM2k95thQ:	19	4	4	1	42	42	14	1	8	13	13	13

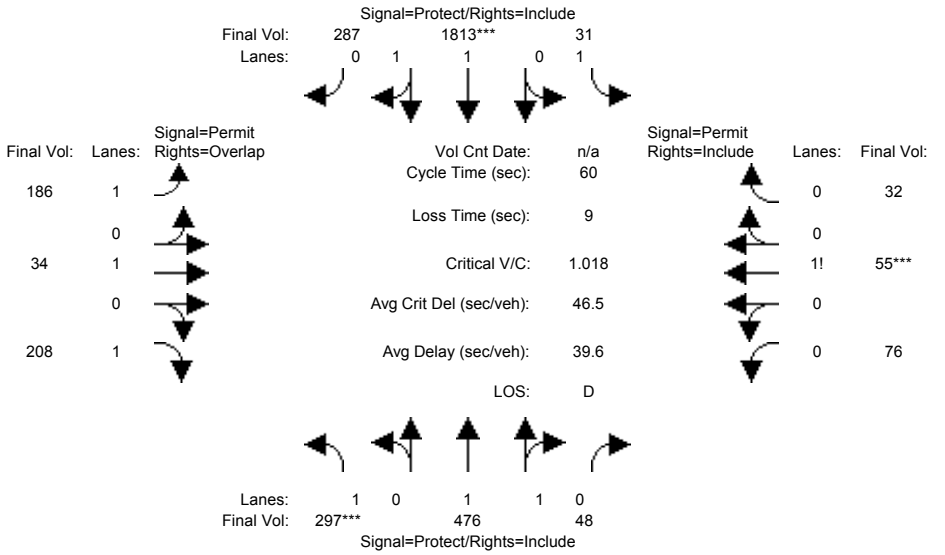
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2000 HCM Operations (Future Volume Alternative)
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Intersection #4: Skyline Boulevard & College Drive [Skyline College]



Street Name:	Skyline Boulevard						College Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:AM Peak Hour												
Base Vol:	297	476	48	31	1813	287	186	34	208	76	55	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	297	476	48	31	1813	287	186	34	208	76	55	32
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	297	476	48	31	1813	287	186	34	208	76	55	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	297	476	48	31	1813	287	186	34	208	76	55	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	297	476	48	31	1813	287	186	34	208	76	55	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	297	476	48	31	1813	287	186	34	208	76	55	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.93	0.93	1.00	1.00	0.85	0.80	0.80	0.80
Lanes:	1.00	1.82	0.18	1.00	1.73	0.27	1.00	1.00	1.00	0.46	0.34	0.20
Final Sat.:	1805	3233	326	1805	3051	483	1900	1900	1615	712	515	300
Capacity Analysis Module:												
Vol/Sat:	0.16	0.15	0.15	0.02	0.59	0.59	0.10	0.02	0.13	0.11	0.11	0.11
Crit Moves:	****			****					****			
Green/Cycle:	0.16	0.67	0.67	0.08	0.58	0.58	0.10	0.10	0.27	0.10	0.10	0.10
Volume/Cap:	1.02	0.22	0.22	0.22	1.02	1.02	0.93	0.17	0.48	1.02	1.02	1.02
Delay/Veh:	82.6	3.9	3.9	26.8	37.0	37.0	71.9	24.9	19.4	102.9	103	102.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	82.6	3.9	3.9	26.8	37.0	37.0	71.9	24.9	19.4	102.9	103	102.9
LOS by Move:	F	A	A	C	D	D	E	C	B	F	F	F
HCM2k95thQ:	21	4	4	2	51	51	14	1	8	14	14	14

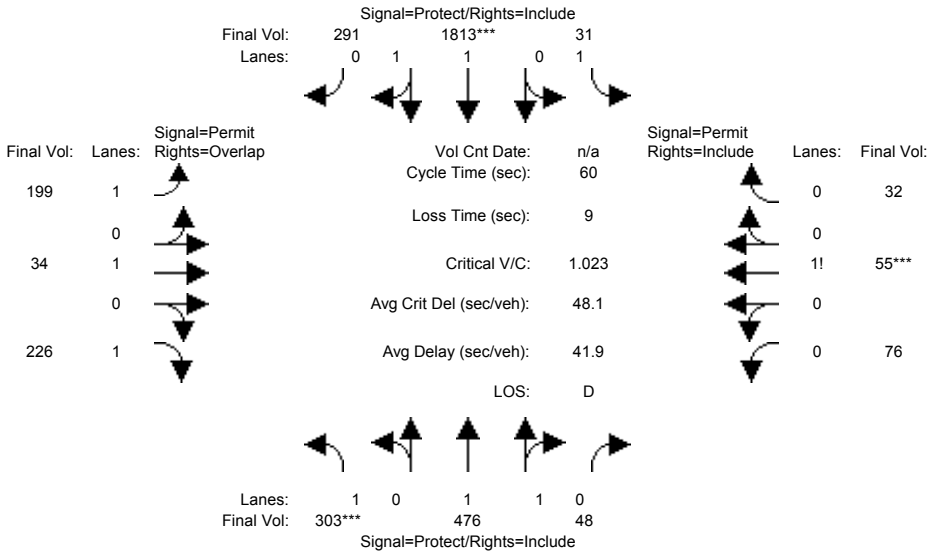
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2000 HCM Operations (Future Volume Alternative)
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Intersection #4: Skyline Boulevard & College Drive [Skyline College]



Street Name:	Skyline Boulevard						College Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:AM Peak Hour												
Base Vol:	303	476	48	31	1813	291	199	34	226	76	55	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	303	476	48	31	1813	291	199	34	226	76	55	32
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	303	476	48	31	1813	291	199	34	226	76	55	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	303	476	48	31	1813	291	199	34	226	76	55	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	303	476	48	31	1813	291	199	34	226	76	55	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	303	476	48	31	1813	291	199	34	226	76	55	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.93	0.93	1.00	1.00	0.85	0.80	0.80	0.80
Lanes:	1.00	1.82	0.18	1.00	1.72	0.28	1.00	1.00	1.00	0.46	0.34	0.20
Final Sat.:	1805	3233	326	1805	3045	489	1900	1900	1615	712	515	300
Capacity Analysis Module:												
Vol/Sat:	0.17	0.15	0.15	0.02	0.60	0.60	0.10	0.02	0.14	0.11	0.11	0.11
Crit Moves:	****			****					****			
Green/Cycle:	0.16	0.67	0.67	0.08	0.58	0.58	0.10	0.10	0.27	0.10	0.10	0.10
Volume/Cap:	1.02	0.22	0.22	0.22	1.02	1.02	1.00	0.17	0.52	1.02	1.02	1.02
Delay/Veh:	83.5	3.9	3.9	26.7	38.6	38.6	91.8	24.9	19.8	104.5	104	104.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	83.5	3.9	3.9	26.7	38.6	38.6	91.8	24.9	19.8	104.5	104	104.5
LOS by Move:	F	A	A	C	D	D	F	C	B	F	F	F
HCM2k95thQ:	21	4	4	2	51	51	16	1	8	14	14	14

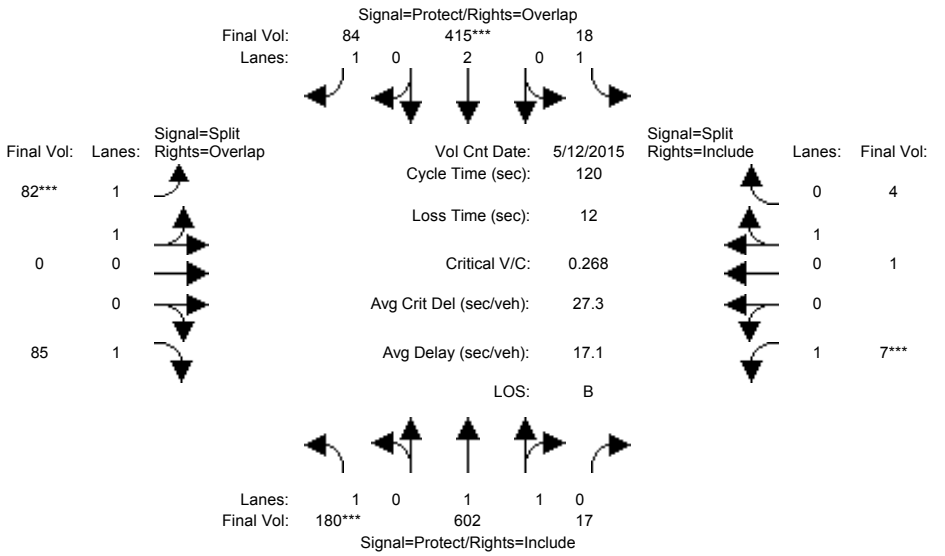
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2000 HCM Operations (Future Volume Alternative)
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Intersection #1: Woodhill Drive & Farm Hill Boulevard [Canada College]



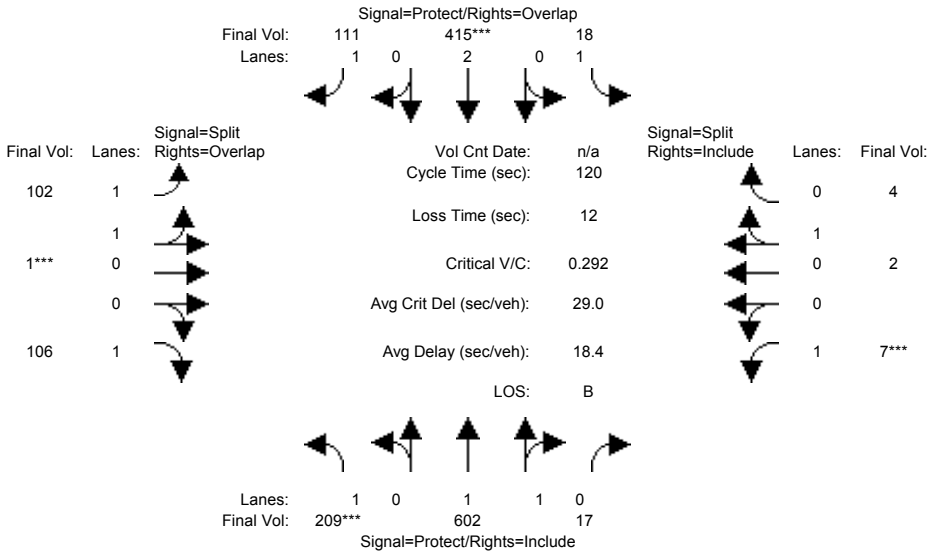

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Street Name:      Farm Hill Boulevard              Woodhill Drive
Approach:     North Bound     South Bound      East Bound      West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Y+R:         4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 May 2015 << 5 - 6 pm
Base Vol:    180  602   17   18  415   84   82    0   85    7    1    4
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 180  602   17   18  415   84   82    0   85    7    1    4
Added Vol:     0    0    0    0    0    0    0    0    0    0    0    0
PasserByVol:   0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut: 180  602   17   18  415   84   82    0   85    7    1    4
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:  180  602   17   18  415   84   82    0   85    7    1    4
Reduct Vol:    0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol: 180  602   17   18  415   84   82    0   85    7    1    4
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 180  602   17   18  415   84   82    0   85    7    1    4
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:  0.95 0.95 0.95 0.95 0.95 0.85 0.95 1.00 0.85 0.95 0.88 0.88
Lanes:       1.00 1.95 0.05 1.00 2.00 1.00 2.00 0.00 1.00 1.00 0.20 0.80
Final Sat.:  1805 3497   99 1805 3610 1615 3618    0 1615 1805  334 1338
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.10 0.17 0.17 0.01 0.11 0.05 0.02 0.00 0.05 0.00 0.00 0.00
Crit Moves:  ****              ****       ****           ****
Green/Cycle: 0.37 0.76 0.76 0.04 0.43 0.51 0.08 0.00 0.46 0.01 0.01 0.01
Volume/Cap:  0.27 0.23 0.23 0.23 0.27 0.10 0.27 0.00 0.12 0.27 0.21 0.21
Delay/Veh:   26.5  4.3  4.3 56.9 22.2 15.0 51.9  0.0 18.8 64.0 62.7 62.7
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  26.5  4.3  4.3 56.9 22.2 15.0 51.9  0.0 18.8 64.0 62.7 62.7
LOS by Move:    C    A    A    E    C    B    D    A    B    E    E    E
HCM2k95thQ:     9    7    7    2   10    3    3    0    4    1    1    1
Note: Queue reported is the number of cars per lane.
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Intersection #1: Woodhill Drive & Farm Hill Boulevard [Canada College]



Street Name:	Farm Hill Boulevard						Woodhill Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: PM Peak Hour												
Base Vol:	209	602	17	18	415	111	102	1	106	7	2	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	209	602	17	18	415	111	102	1	106	7	2	4
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	209	602	17	18	415	111	102	1	106	7	2	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	209	602	17	18	415	111	102	1	106	7	2	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	209	602	17	18	415	111	102	1	106	7	2	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	209	602	17	18	415	111	102	1	106	7	2	4
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.90	0.90
Lanes:	1.00	1.95	0.05	1.00	2.00	1.00	1.98	0.02	1.00	1.00	0.33	0.67
Final Sat.:	1805	3497	99	1805	3610	1615	3586	35	1615	1805	570	1140
Capacity Analysis Module:												
Vol/Sat:	0.12	0.17	0.17	0.01	0.11	0.07	0.03	0.03	0.07	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
Green/Cycle:	0.40	0.75	0.75	0.04	0.39	0.49	0.10	0.10	0.49	0.01	0.01	0.01
Volume/Cap:	0.29	0.23	0.23	0.23	0.29	0.14	0.29	0.29	0.13	0.29	0.26	0.26
Delay/Veh:	25.0	4.7	4.7	57.0	25.1	16.8	50.8	50.8	16.6	65.3	64.8	64.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.0	4.7	4.7	57.0	25.1	16.8	50.8	50.8	16.6	65.3	64.8	64.8
LOS by Move:	C	A	A	E	C	B	D	D	B	E	E	E
HCM2k95thQ:	10	7	7	2	11	4	4	4	4	1	1	1

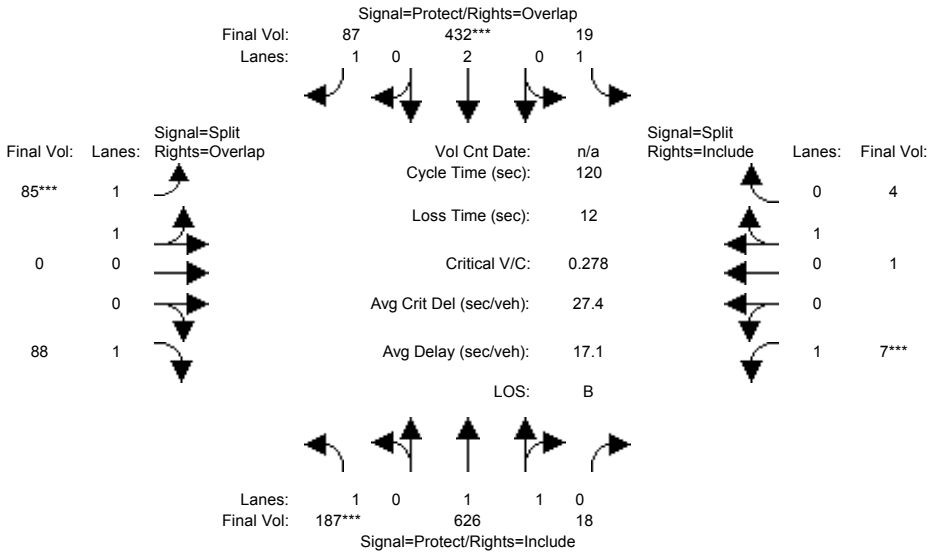
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2000 HCM Operations (Future Volume Alternative)
Cum PM

Intersection #1: Woodhill Drive & Farm Hill Boulevard [Canada College]



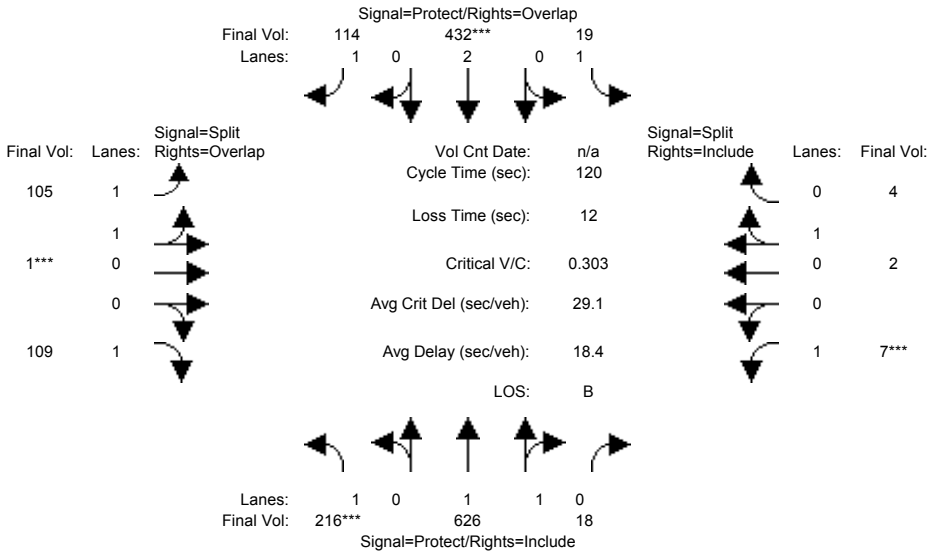

```
Street Name:      Farm Hill Boulevard              Woodhill Drive
Approach:     North Bound     South Bound     East Bound      West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Y+R:         4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.0  4.0
------------|---------------||---------------||---------------||---------------|
Volume Module:PM Peak Hour
Base Vol:    187  626   18   19  432   87   85    0   88    7    1    4
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 187  626   18   19  432   87   85    0   88    7    1    4
Added Vol:     0    0    0    0    0    0    0    0    0    0    0    0
PasserByVol:   0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut: 187  626   18   19  432   87   85    0   88    7    1    4
User Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:  187  626   18   19  432   87   85    0   88    7    1    4
Reduct Vol:    0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol: 187  626   18   19  432   87   85    0   88    7    1    4
PCE Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 187  626   18   19  432   87   85    0   88    7    1    4
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 0.95 0.95 0.95 0.85 0.95 1.00 0.85 0.95 0.88 0.88
Lanes:      1.00 1.94 0.06 1.00 2.00 1.00 2.00 0.00 1.00 1.00 0.20 0.80
Final Sat.: 1805 3495  100 1805 3610 1615 3618    0 1615 1805  334 1338
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.10 0.18 0.18 0.01 0.12 0.05 0.02 0.00 0.05 0.00 0.00 0.00
Crit Moves:  ****              ****      ****           ****
Green/Cycle: 0.37 0.76 0.76 0.04 0.43 0.51 0.08 0.00 0.46 0.01 0.01 0.01
Volume/Cap:  0.28 0.24 0.24 0.24 0.28 0.10 0.28 0.00 0.12 0.28 0.21 0.21
Delay/Veh:   26.6  4.4  4.4 56.9 22.3 15.0 52.0  0.0 18.8 64.5 63.1 63.1
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:  26.6  4.4  4.4 56.9 22.3 15.0 52.0  0.0 18.8 64.5 63.1 63.1
LOS by Move:    C    A    A    E    C    B    D    A    B    E    E    E
HCM2k95thQ:     9    7    7    2   10    3    3    0    4    1    1    1
Note: Queue reported is the number of cars per lane.
```


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SMCCCD Facility Master Plan EIR
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+Proj PM

Intersection #1: Woodhill Drive & Farm Hill Boulevard [Canada College]



Street Name:	Farm Hill Boulevard						Woodhill Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: PM Peak Hour												
Base Vol:	216	626	18	19	432	114	105	1	109	7	2	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	216	626	18	19	432	114	105	1	109	7	2	4
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	216	626	18	19	432	114	105	1	109	7	2	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	216	626	18	19	432	114	105	1	109	7	2	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	216	626	18	19	432	114	105	1	109	7	2	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	216	626	18	19	432	114	105	1	109	7	2	4
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.90	0.90
Lanes:	1.00	1.94	0.06	1.00	2.00	1.00	1.98	0.02	1.00	1.00	0.33	0.67
Final Sat.:	1805	3495	100	1805	3610	1615	3587	34	1615	1805	570	1140
Capacity Analysis Module:												
Vol/Sat:	0.12	0.18	0.18	0.01	0.12	0.07	0.03	0.03	0.07	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
Green/Cycle:	0.40	0.75	0.75	0.04	0.40	0.49	0.10	0.10	0.49	0.01	0.01	0.01
Volume/Cap:	0.30	0.24	0.24	0.24	0.30	0.14	0.30	0.30	0.14	0.30	0.27	0.27
Delay/Veh:	25.2	4.7	4.7	57.0	25.0	16.7	50.9	50.9	16.7	66.0	65.4	65.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.2	4.7	4.7	57.0	25.0	16.7	50.9	50.9	16.7	66.0	65.4	65.4
LOS by Move:	C	A	A	E	C	B	D	D	B	E	E	E
HCM2k95thQ:	10	8	8	2	11	5	4	4	4	1	1	1

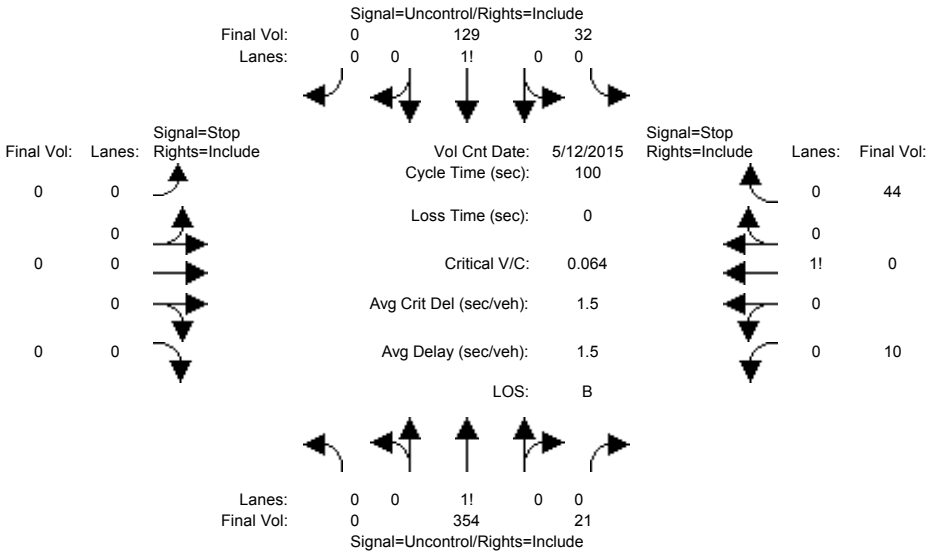
Note: Queue reported is the number of cars per lane.

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SMCCCD Facility Master Plan EIR
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Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex PM

Intersection #2: Canada Road & West Entry Drive [Canada College]



Street Name:	Canada Road						West Entry Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 12 May 2015 << 5 - 6 pm												
Base Vol:	0	354	21	32	129	0	0	0	0	10	0	44
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	354	21	32	129	0	0	0	0	10	0	44
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	354	21	32	129	0	0	0	0	10	0	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	354	21	32	129	0	0	0	0	10	0	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	354	21	32	129	0	0	0	0	10	0	44
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	375	xxxx	xxxxx	xxxx	xxxx	xxxxx	558	558	365
Potent Cap.:	xxxx	xxxx	xxxxx	1195	xxxx	xxxxx	xxxx	xxxx	xxxxx	495	441	685
Move Cap.:	xxxx	xxxx	xxxxx	1195	xxxx	xxxxx	xxxx	xxxx	xxxxx	484	429	685
Volume/Cap:	xxxx	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.06
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	636	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.2	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			11.2		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Canada Road & West Entry Drive

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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------------|---------------||---------------||---------------||---------------|
Approach:     North Bound     South Bound      East Bound      West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Uncontrolled    Uncontrolled     Stop Sign       Stop Sign
Lanes:       0  0  0  1  0   0  1  0  0  0   0  0  0  0  0   0  0  1! 0  0
Initial Vol:    0  354   21   32  129    0    0    0    0   10    0   44
ApproachDel:   xxxxxx         xxxxxx         xxxxxx           11.2
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
  FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=54]
  FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=590]
  FAIL - Total volume less than 650 for intersection
       with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
            Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #2 Canada Road & West Entry Drive
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound     South Bound      East Bound      West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Uncontrolled    Uncontrolled     Stop Sign       Stop Sign
Lanes:       0  0  0  1  0   0  1  0  0  0   0  0  0  0  0   0  0  1! 0  0
Initial Vol:    0  354   21   32  129    0    0    0    0   10    0   44
------------|---------------||---------------||---------------||---------------|
Major Street Volume:           536
Minor Approach Volume:          54
Minor Approach Volume Threshold: 386
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

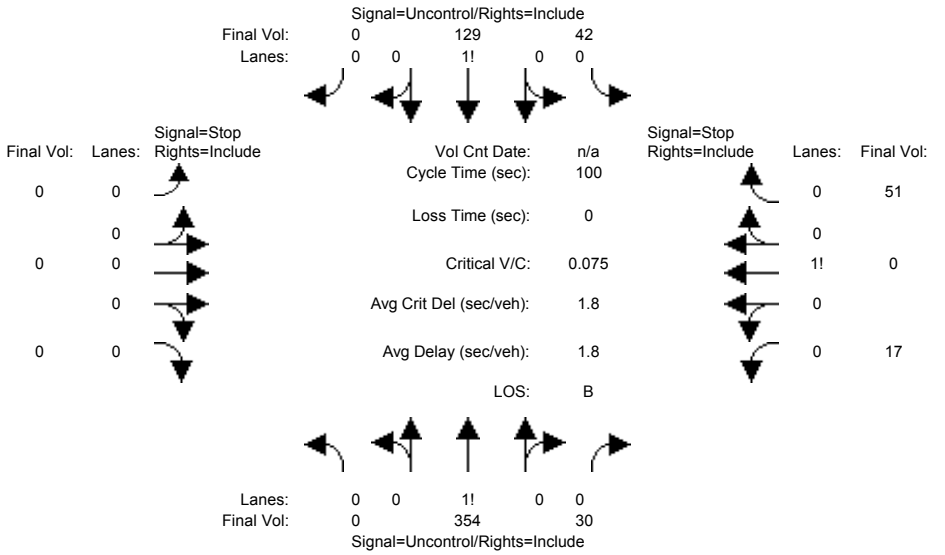
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jurisdiction.  Consideration of the other signal warrants, which is beyond
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```

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Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Ex+Proj PM

Intersection #2: Canada Road & West Entry Drive [Canada College]



Street Name:	Canada Road						West Entry Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: PM Peak Hour												
Base Vol:	0	354	30	42	129	0	0	0	0	17	0	51
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	354	30	42	129	0	0	0	0	17	0	51
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	354	30	42	129	0	0	0	0	17	0	51
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	354	30	42	129	0	0	0	0	17	0	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	354	30	42	129	0	0	0	0	17	0	51
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	384	xxxx	xxxxx	xxxx	xxxx	xxxxx	582	582	369
Potent Cap.:	xxxx	xxxx	xxxxx	1186	xxxx	xxxxx	xxxx	xxxx	xxxxx	479	427	681
Move Cap.:	xxxx	xxxx	xxxxx	1186	xxxx	xxxxx	xxxx	xxxx	xxxxx	465	412	681
Volume/Cap:	xxxx	xxxx	xxxx	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.07
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	610	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.6	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			11.6		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Canada Road & West Entry Drive

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Initial Vol:	0	354	30	42	129	0	0	0	0	17	0	51
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			11.6		

Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=68]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=623]
FAIL - Total volume less than 650 for intersection
with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Canada Road & West Entry Drive

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Initial Vol:	0	354	30	42	129	0	0	0	0	17	0	51

Major Street Volume: 555
Minor Approach Volume: 68
Minor Approach Volume Threshold: 376

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

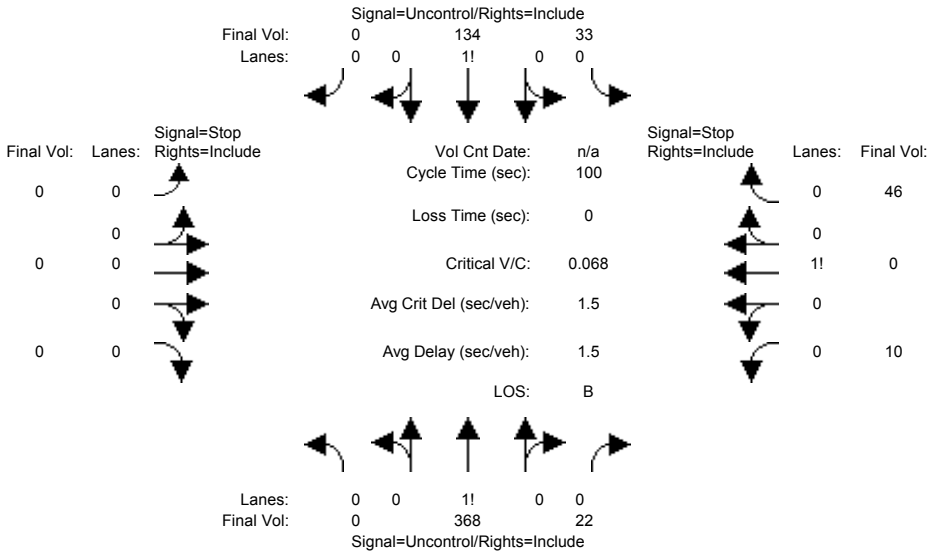
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SMCCCD Facility Master Plan EIR
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Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cum PM

Intersection #2: Canada Road & West Entry Drive [Canada College]



Street Name:	Canada Road						West Entry Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: PM Peak Hour												
Base Vol:	0	368	22	33	134	0	0	0	0	10	0	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	368	22	33	134	0	0	0	0	10	0	46
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	368	22	33	134	0	0	0	0	10	0	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	368	22	33	134	0	0	0	0	10	0	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	368	22	33	134	0	0	0	0	10	0	46
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	390	xxxx	xxxxx	xxxx	xxxx	xxxxx	579	579	379
Potent Cap.:	xxxx	xxxx	xxxxx	1180	xxxx	xxxxx	xxxx	xxxx	xxxxx	481	429	672
Move Cap.:	xxxx	xxxx	xxxxx	1180	xxxx	xxxxx	xxxx	xxxx	xxxxx	470	417	672
Volume/Cap:	xxxx	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.07
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	624	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.3	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			11.3		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Canada Road & West Entry Drive

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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```
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound     South Bound      East Bound      West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Uncontrolled    Uncontrolled     Stop Sign       Stop Sign
Lanes:       0  0  0  1  0   0  1  0  0  0   0  0  0  0  0   0  0  1! 0  0
Initial Vol:    0  368   22   33  134    0    0   0    0   10   0   46
ApproachDel:   xxxxxx         xxxxxx         xxxxxx          11.3
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
  FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=56]
  FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=613]
  FAIL - Total volume less than 650 for intersection
       with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
           Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #2 Canada Road & West Entry Drive
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound     South Bound      East Bound      West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Uncontrolled    Uncontrolled     Stop Sign       Stop Sign
Lanes:       0  0  0  1  0   0  1  0  0  0   0  0  0  0  0   0  0  1! 0  0
Initial Vol:    0  368   22   33  134    0    0   0    0   10   0   46
------------|---------------||---------------||---------------||---------------|
Major Street Volume:           557
Minor Approach Volume:          56
Minor Approach Volume Threshold: 375
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

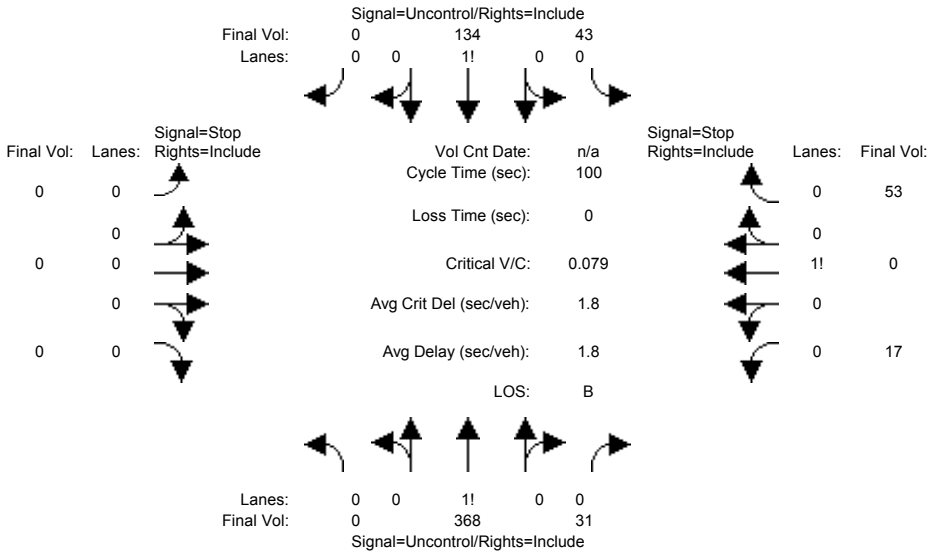
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jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
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SMCCCD Facility Master Plan EIR
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Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cum+Proj PM

Intersection #2: Canada Road & West Entry Drive [Canada College]




```
Street Name:          Canada Road                    West Entry Drive
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module:PM Peak Hour
Base Vol:       0  368   31    43  134    0     0    0    0     0   17    0   53
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  368   31    43  134    0     0    0    0     0   17    0   53
Added Vol:      0    0    0     0    0    0     0    0    0     0    0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0    0
Initial Fut:    0  368   31    43  134    0     0    0    0     0   17    0   53
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  368   31    43  134    0     0    0    0     0   17    0   53
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0    0
FinalVolume:    0  368   31    43  134    0     0    0    0     0   17    0   53
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   399 xxxx xxxxx  xxxx xxxx xxxxx   604  604   384
Potent Cap.: xxxx xxxx xxxxx  1171 xxxx xxxxx  xxxx xxxx xxxxx   465  415   668
Move Cap.:   xxxx xxxx xxxxx  1171 xxxx xxxxx  xxxx xxxx xxxxx   452  400   668
Volume/Cap:  xxxx xxxx  xxxx  0.04 xxxx  xxxx  xxxx xxxx  xxxx  0.04 0.00  0.08
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   0.1 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   8.2 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     A    *     *    *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx  599 xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.4 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx   8.2 xxxx xxxxx xxxxx xxxx xxxxx xxxxx 11.8 xxxxx
Shared LOS:     *    *     *     A    *     *    *    *     *     *    B     *
ApproachDel:    xxxxxx          xxxxxx          xxxxxx          11.8
ApproachLOS:         *               *               *          B
Note: Queue reported is the number of cars per lane.
                  Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #2 Canada Road & West Entry Drive
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Initial Vol:	0	368	31	43	134	0	0	0	0	17	0	53
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			11.8		

Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=70]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=646]
FAIL - Total volume less than 650 for intersection
with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Canada Road & West Entry Drive

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Initial Vol:	0	368	31	43	134	0	0	0	0	17	0	53

Major Street Volume: 576
Minor Approach Volume: 70
Minor Approach Volume Threshold: 367

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

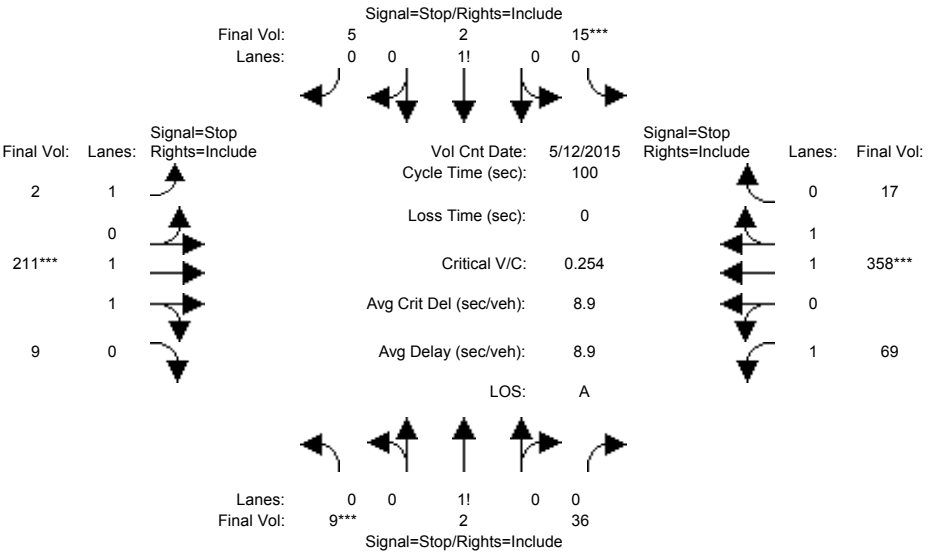
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Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex PM

Intersection #3: Sheryl Drive & College Drive [Skyline College]



Street Name:	Sheryl Drive						College Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 12 May 2015 << 5 - 6 pm												
Base Vol:	9	2	36	15	2	5	2	211	9	69	358	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	2	36	15	2	5	2	211	9	69	358	17
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	2	36	15	2	5	2	211	9	69	358	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	2	36	15	2	5	2	211	9	69	358	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	2	36	15	2	5	2	211	9	69	358	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	2	36	15	2	5	2	211	9	69	358	17
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.19	0.04	0.77	0.68	0.09	0.23	1.00	1.92	0.08	1.00	1.91	0.09
Final Sat.:	131	29	524	427	57	142	635	1346	58	665	1407	67
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.04	0.04	0.04	0.00	0.16	0.16	0.10	0.25	0.25
Crit Moves:	****			****			****			****		
Delay/Veh:	8.2	8.2	8.2	8.5	8.5	8.5	8.3	8.6	8.6	8.7	9.1	9.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.2	8.2	8.2	8.5	8.5	8.5	8.3	8.6	8.6	8.7	9.1	9.1
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	8.2			8.5			8.6			9.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.2			8.5			8.6			9.1		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.3	0.3

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #3 Sheryl Drive & College Drive

****

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Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Lanes:	0 0	1!	0 0	0 0	1!	0 0	1 0	1	1 0	1 0	1	1 0
Initial Vol:	9	2	36	15	2	5	2	211	9	69	358	17

Major Street Volume: 666
Minor Approach Volume: 47
Minor Approach Volume Threshold: 425

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

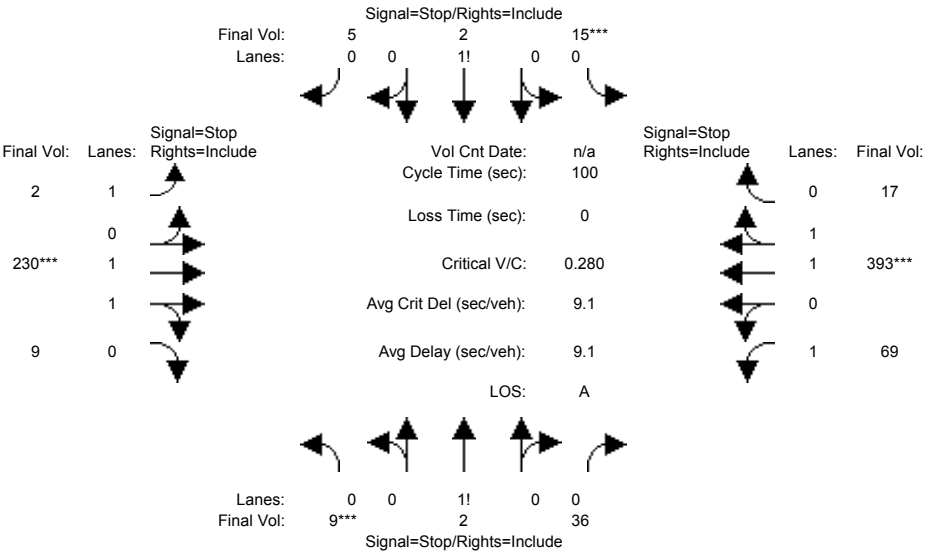
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Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Ex+Proj PM

Intersection #3: Sheryl Drive & College Drive [Skyline College]




```
Street Name:          Sheryl Drive                College Drive
Approach:      North Bound     South Bound     East Bound      West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Min. Green:     0    0    0    0    0    0    0    0    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Volume Module:PM Peak Hour
Base Vol:       9    2   36   15    2    5    2  230    9   69  393   17
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    9    2   36   15    2    5    2  230    9   69  393   17
Added Vol:      0    0    0    0    0    0    0    0    0    0    0    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:    9    2   36   15    2    5    2  230    9   69  393   17
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     9    2   36   15    2    5    2  230    9   69  393   17
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:    9    2   36   15    2    5    2  230    9   69  393   17
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume:    9    2   36   15    2    5    2  230    9   69  393   17
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:       0.19 0.04 0.77 0.68 0.09 0.23 1.00 1.92 0.08 1.00 1.92 0.08
Final Sat.:   129   29  514  419   56  140  630 1339   53  662 1406   61
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.07 0.07 0.04 0.04 0.04 0.00 0.17 0.17 0.10 0.28 0.28
Crit Moves:  ****          ****               ****          ****
Delay/Veh:    8.3  8.3  8.3  8.6  8.6  8.6  8.3  8.8  8.8  8.7  9.4  9.3
Delay Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   8.3  8.3  8.3  8.6  8.6  8.6  8.3  8.8  8.8  8.7  9.4  9.3
LOS by Move:    A    A    A    A    A    A    A    A    A    A    A    A
ApproachDel:       8.3            8.6            8.8            9.3
Delay Adj:        1.00           1.00           1.00           1.00
ApprAdjDel:        8.3            8.6            8.8            9.3
LOS by Appr:         A              A              A              A
AllWayAvgQ:   0.1  0.1  0.1  0.0  0.0  0.0  0.0  0.2  0.2  0.1  0.4  0.4
Note: Queue reported is the number of cars per lane.
```

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #3 Sheryl Drive & College Drive

****

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Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Lanes:	0 0	1!	0 0	0 0	1!	0 0	1 0	1	1 0	1 0	1	1 0
Initial Vol:	9	2	36	15	2	5	2	230	9	69	393	17

Major Street Volume: 720
Minor Approach Volume: 47
Minor Approach Volume Threshold: 398

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

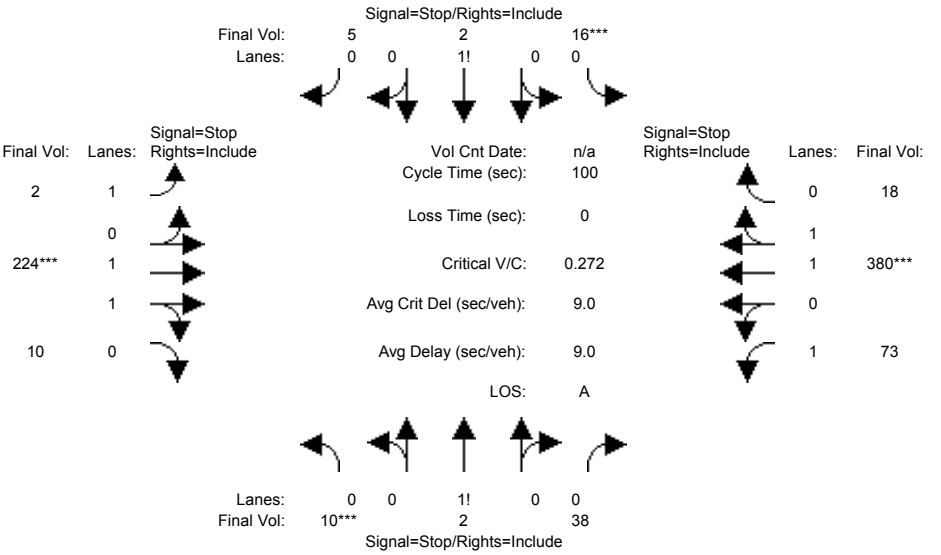
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Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum PM

Intersection #3: Sheryl Drive & College Drive [Skyline College]



Street Name:	Sheryl Drive						College Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:PM Peak Hour												
Base Vol:	10	2	38	16	2	5	2	224	10	73	380	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	2	38	16	2	5	2	224	10	73	380	18
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	2	38	16	2	5	2	224	10	73	380	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	2	38	16	2	5	2	224	10	73	380	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	2	38	16	2	5	2	224	10	73	380	18
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	2	38	16	2	5	2	224	10	73	380	18
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.04	0.76	0.69	0.09	0.22	1.00	1.91	0.09	1.00	1.91	0.09
Final Sat.:	135	27	512	428	53	134	630	1331	60	660	1399	67
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.04	0.04	0.04	0.00	0.17	0.17	0.11	0.27	0.27
Crit Moves:	****			****			****			****		
Delay/Veh:	8.3	8.3	8.3	8.6	8.6	8.6	8.3	8.8	8.7	8.7	9.3	9.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.3	8.3	8.3	8.6	8.6	8.6	8.3	8.8	8.7	8.7	9.3	9.3
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	8.3			8.6			8.8			9.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.3			8.6			8.8			9.2		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.4	0.4

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #3 Sheryl Drive & College Drive

****

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Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Lanes:	0	0 1!	0	0	0 1!	0	1	0 1	1 0	1	0 1	1 0
Initial Vol:	10	2	38	16	2	5	2	224	10	73	380	18

Major Street Volume: 707
Minor Approach Volume: 50
Minor Approach Volume Threshold: 404

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

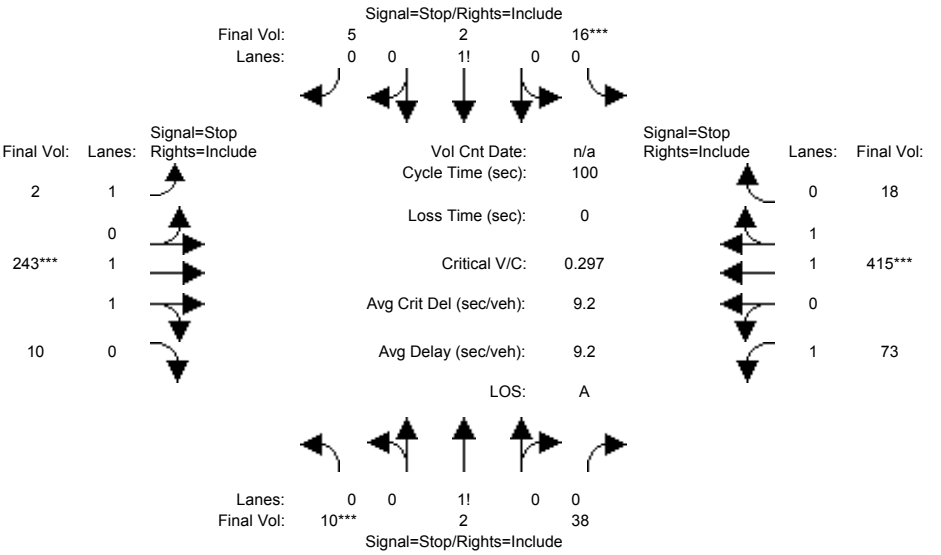
The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum+Proj PM

Intersection #3: Sheryl Drive & College Drive [Skyline College]




```
Street Name:          Sheryl Drive                College Drive
Approach:      North Bound     South Bound     East Bound      West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Min. Green:     0    0    0    0    0    0    0    0    0    0    0    0
------------|---------------||---------------||---------------||---------------|
Volume Module:PM Peak Hour
Base Vol:      10    2   38   16    2    5    2  243   10   73  415   18
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   10    2   38   16    2    5    2  243   10   73  415   18
Added Vol:      0    0    0    0    0    0    0    0    0    0    0    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:   10    2   38   16    2    5    2  243   10   73  415   18
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    10    2   38   16    2    5    2  243   10   73  415   18
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   10    2   38   16    2    5    2  243   10   73  415   18
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume:   10    2   38   16    2    5    2  243   10   73  415   18
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:       0.20 0.04 0.76 0.69 0.09 0.22 1.00 1.92 0.08 1.00 1.92 0.08
Final Sat.:   132   26  502  421   53  131  624 1325   55  657 1398   61
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.08 0.08 0.08 0.04 0.04 0.04 0.00 0.18 0.18 0.11 0.30 0.30
Crit Moves:  ****          ****               ****          ****
Delay/Veh:    8.4  8.4  8.4  8.7  8.7  8.7  8.4  8.9  8.9  8.8  9.6  9.5
Delay Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:   8.4  8.4  8.4  8.7  8.7  8.7  8.4  8.9  8.9  8.8  9.6  9.5
LOS by Move:    A    A    A    A    A    A    A    A    A    A    A    A
ApproachDel:        8.4            8.7            8.9            9.5
Delay Adj:         1.00           1.00           1.00           1.00
ApprAdjDel:         8.4            8.7            8.9            9.5
LOS by Appr:          A              A              A              A
AllWayAvgQ:   0.1  0.1  0.1  0.0  0.0  0.0  0.0  0.2  0.2  0.1  0.4  0.4
Note: Queue reported is the number of cars per lane.
```

Peak Hour Volume Signal Warrant Report [Urban]

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******************************************************************************
Intersection #3 Sheryl Drive & College Drive
******************************************************************************
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Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Lanes:	0	0 1!	0	0	0 1!	0	1	0 1	1 0	1	0 1	1 0
Initial Vol:	10	2	38	16	2	5	2	243	10	73	415	18

Major Street Volume: 761
Minor Approach Volume: 50
Minor Approach Volume Threshold: 379

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

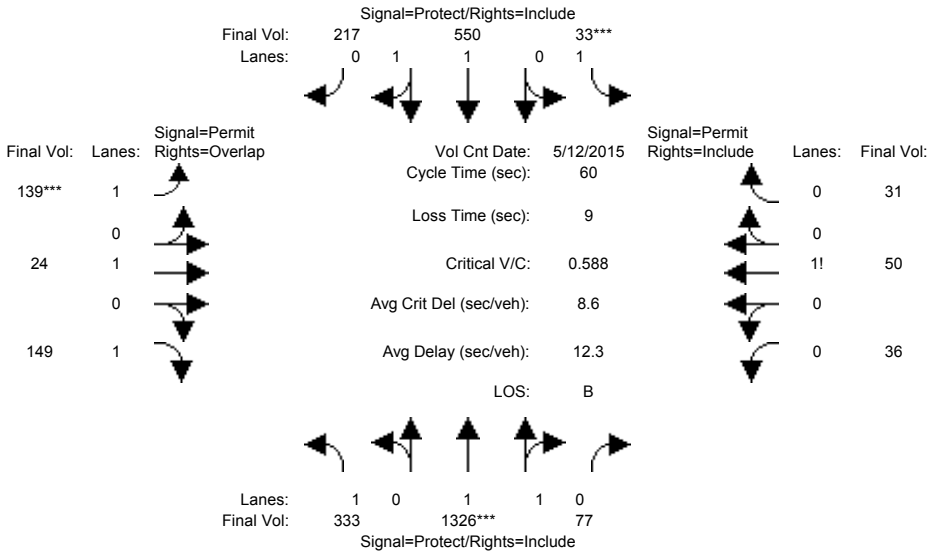
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex PM

Intersection #4: Skyline Boulevard & College Drive [Skyline College]



Street Name:	Skyline Boulevard						College Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 12 May 2015 << 5 - 6 pm												
Base Vol:	333	1326	77	33	550	217	139	24	149	36	50	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	333	1326	77	33	550	217	139	24	149	36	50	31
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	333	1326	77	33	550	217	139	24	149	36	50	31
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	333	1326	77	33	550	217	139	24	149	36	50	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	333	1326	77	33	550	217	139	24	149	36	50	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	333	1326	77	33	550	217	139	24	149	36	50	31
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.91	0.91	0.82	1.00	0.85	0.87	0.87	0.87
Lanes:	1.00	1.89	0.11	1.00	1.43	0.57	1.00	1.00	1.00	0.31	0.43	0.26
Final Sat.:	1805	3385	197	1805	2480	978	1549	1900	1615	507	704	436
Capacity Analysis Module:												
Vol/Sat:	0.18	0.39	0.39	0.02	0.22	0.22	0.09	0.01	0.09	0.07	0.07	0.07
Crit Moves:		****			****			****				
Green/Cycle:	0.32	0.67	0.67	0.03	0.38	0.38	0.15	0.15	0.47	0.15	0.15	0.15
Volume/Cap:	0.58	0.59	0.59	0.59	0.58	0.58	0.59	0.08	0.20	0.47	0.47	0.47
Delay/Veh:	18.7	5.9	5.9	44.0	15.5	15.5	27.5	21.9	9.4	24.6	24.6	24.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.7	5.9	5.9	44.0	15.5	15.5	27.5	21.9	9.4	24.6	24.6	24.6
LOS by Move:	B	A	A	D	B	B	C	C	A	C	C	C
HCM2k95thQ:	12	15	15	3	13	13	7	1	3	5	5	5

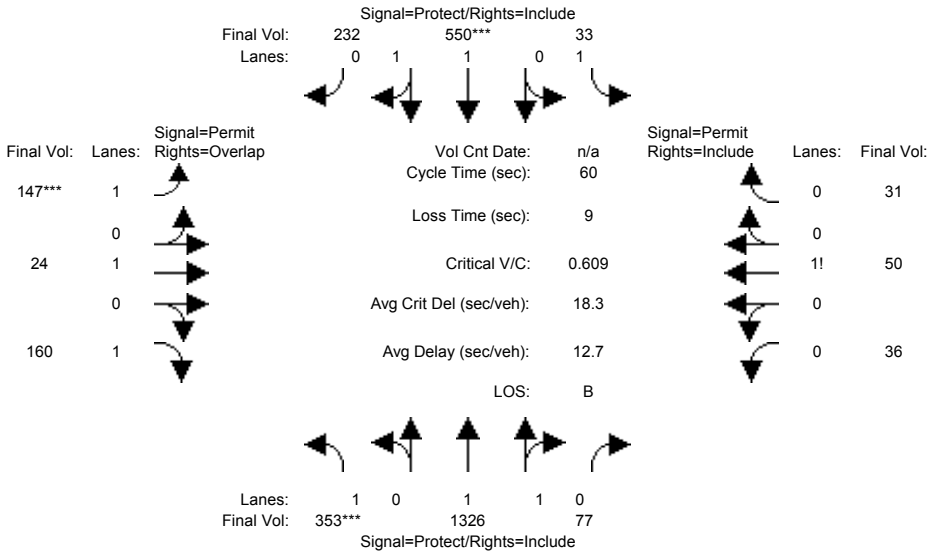
Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Ex+Proj PM

Intersection #4: Skyline Boulevard & College Drive [Skyline College]



Street Name:	Skyline Boulevard						College Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: PM Peak Hour												
Base Vol:	353	1326	77	33	550	232	147	24	160	36	50	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	353	1326	77	33	550	232	147	24	160	36	50	31
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	353	1326	77	33	550	232	147	24	160	36	50	31
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	353	1326	77	33	550	232	147	24	160	36	50	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	353	1326	77	33	550	232	147	24	160	36	50	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	353	1326	77	33	550	232	147	24	160	36	50	31
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.91	0.91	0.81	1.00	0.85	0.87	0.87	0.87
Lanes:	1.00	1.89	0.11	1.00	1.41	0.59	1.00	1.00	1.00	0.31	0.43	0.26
Final Sat.:	1805	3385	197	1805	2425	1023	1539	1900	1615	507	704	437
Capacity Analysis Module:												
Vol/Sat:	0.20	0.39	0.39	0.02	0.23	0.23	0.10	0.01	0.10	0.07	0.07	0.07
Crit Moves:	****				****			****				
Green/Cycle:	0.32	0.66	0.66	0.03	0.37	0.37	0.16	0.16	0.48	0.16	0.16	0.16
Volume/Cap:	0.61	0.59	0.59	0.59	0.61	0.61	0.61	0.08	0.21	0.45	0.45	0.45
Delay/Veh:	19.1	6.0	6.0	44.5	16.1	16.1	28.1	21.7	9.2	24.2	24.2	24.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.1	6.0	6.0	44.5	16.1	16.1	28.1	21.7	9.2	24.2	24.2	24.2
LOS by Move:	B	A	A	D	B	B	C	C	A	C	C	C
HCM2k95thQ:	12	16	16	3	13	13	7	1	4	5	5	5

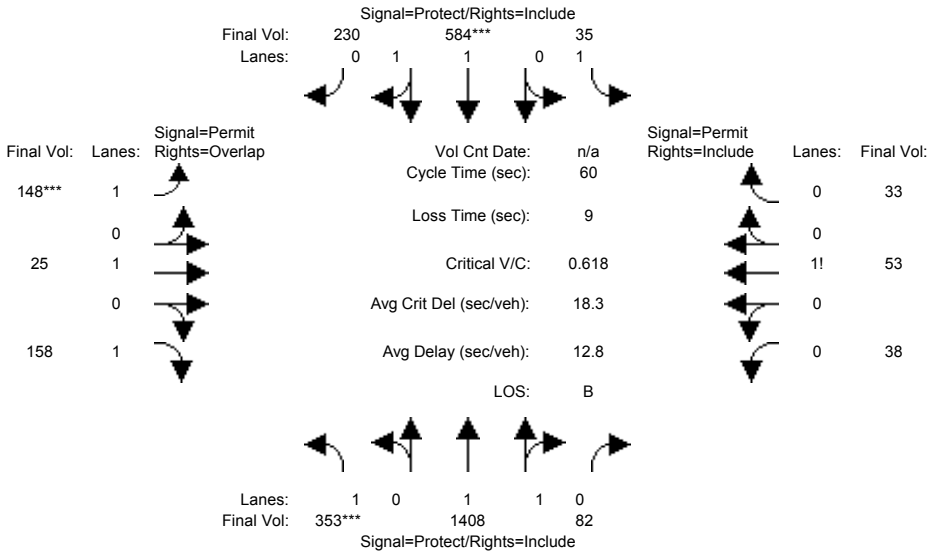
Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum PM

Intersection #4: Skyline Boulevard & College Drive [Skyline College]



Street Name:	Skyline Boulevard						College Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: PM Peak Hour												
Base Vol:	353	1408	82	35	584	230	148	25	158	38	53	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	353	1408	82	35	584	230	148	25	158	38	53	33
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	353	1408	82	35	584	230	148	25	158	38	53	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	353	1408	82	35	584	230	148	25	158	38	53	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	353	1408	82	35	584	230	148	25	158	38	53	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	353	1408	82	35	584	230	148	25	158	38	53	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.91	0.91	0.82	1.00	0.85	0.86	0.86	0.86
Lanes:	1.00	1.89	0.11	1.00	1.43	0.57	1.00	1.00	1.00	0.31	0.43	0.26
Final Sat.:	1805	3384	197	1805	2481	977	1564	1900	1615	503	702	437
Capacity Analysis Module:												
Vol/Sat:	0.20	0.42	0.42	0.02	0.24	0.24	0.09	0.01	0.10	0.08	0.08	0.08
Crit Moves:	****				****			****				
Green/Cycle:	0.32	0.67	0.67	0.03	0.38	0.38	0.15	0.15	0.47	0.15	0.15	0.15
Volume/Cap:	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.09	0.21	0.49	0.49	0.49
Delay/Veh:	19.5	6.3	6.3	48.8	16.0	16.0	28.6	21.9	9.5	24.8	24.8	24.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.5	6.3	6.3	48.8	16.0	16.0	28.6	21.9	9.5	24.8	24.8	24.8
LOS by Move:	B	A	A	D	B	B	C	C	A	C	C	C
HCM2k95thQ:	13	17	17	4	14	14	7	1	4	6	6	6

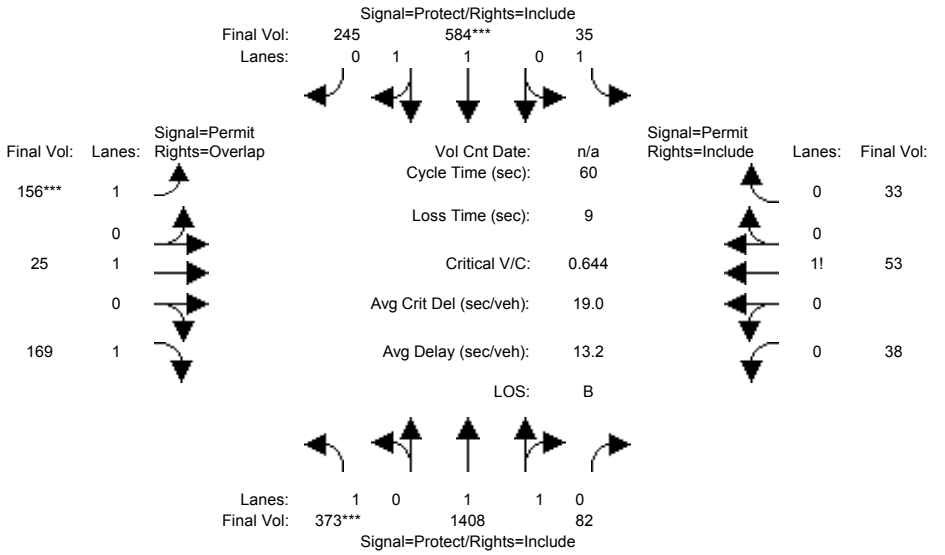
Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum+Proj PM

Intersection #4: Skyline Boulevard & College Drive [Skyline College]



Street Name:	Skyline Boulevard						College Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: PM Peak Hour												
Base Vol:	373	1408	82	35	584	245	156	25	169	38	53	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	373	1408	82	35	584	245	156	25	169	38	53	33
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	373	1408	82	35	584	245	156	25	169	38	53	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	373	1408	82	35	584	245	156	25	169	38	53	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	373	1408	82	35	584	245	156	25	169	38	53	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	373	1408	82	35	584	245	156	25	169	38	53	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.91	0.91	0.82	1.00	0.85	0.87	0.87	0.87
Lanes:	1.00	1.89	0.11	1.00	1.41	0.59	1.00	1.00	1.00	0.31	0.43	0.26
Final Sat.:	1805	3384	197	1805	2431	1020	1556	1900	1615	504	703	438
Capacity Analysis Module:												
Vol/Sat:	0.21	0.42	0.42	0.02	0.24	0.24	0.10	0.01	0.10	0.08	0.08	0.08
Crit Moves:	****				****			****				
Green/Cycle:	0.32	0.66	0.66	0.03	0.37	0.37	0.16	0.16	0.48	0.16	0.16	0.16
Volume/Cap:	0.64	0.63	0.63	0.63	0.64	0.64	0.64	0.08	0.22	0.48	0.48	0.48
Delay/Veh:	19.9	6.4	6.4	49.2	16.6	16.6	29.6	21.8	9.3	24.6	24.6	24.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.9	6.4	6.4	49.2	16.6	16.6	29.6	21.8	9.3	24.6	24.6	24.6
LOS by Move:	B	A	A	D	B	B	C	C	A	C	C	C
HCM2k95thQ:	13	17	17	4	15	15	8	1	4	6	6	6

Note: Queue reported is the number of cars per lane.

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MITIGATION MONITORING AND REPORTING PROGRAM

2015 FACILITIES MASTER PLAN AMENDMENT PROJECT

SCH# 2015052007

San Mateo County Community College District
3401 CSM Drive
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November 2015

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List of Abbreviations and Acronyms

ACMs	asbestos-containing materials
ASTM	American Society for Testing and Materials
BLM	Bureau of Land Management
BMPs	best management practices
Cal-OSHA	California Occupational Safety and Health Administration
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CSM	College of San Mateo
District	San Mateo County Community College District
EIR	Environmental Impact Report
MMRP	mitigation monitoring and reporting program
NESHAP	National Emissions Standards for Hazardous Air Pollutants
PRC	Public Resources Code
Project	2015 Facilities Master Plan Amendment
SPCCP	Spill Prevention, Control, and Countermeasure Program
SVP	Society of Vertebrate Paleontology
SWPPP	Storm Water Pollution Prevention Plan

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Mitigation Monitoring and Reporting Program

Introduction

The San Mateo County Community College District (District) as Lead Agency under the California Environmental Quality Act (CEQA) and State CEQA Guidelines, has prepared the Final Environmental Impact Report (EIR) for the 2015 Facilities Master Plan Amendment (Project) (SCH # 2015052007). When a lead agency makes findings on significant effects identified in an EIR, it must also adopt a program for reporting or monitoring mitigation measures that were adopted or made conditions of project approval (Public Resources Code [PRC] Section 21081.6[a]; State CEQA Guidelines Sections 15091[d], 15097).

This document represents the mitigation monitoring and reporting program (MMRP) prepared by the District for the Project. This MMRP includes all measures required to reduce potentially significant environmental impacts to a less-than-significant level. It also identifies the timing of implementation; the agency responsible for implementing the mitigation; and the agency responsible for monitoring the mitigation. The mitigation measures, timing, and responsibility are summarized in Tables 1 through 3, and the full text of the mitigation measures follows. Table 1 lists the mitigation measures required for the improvements at Cañada College; Table 2 lists the mitigation measures required for the improvements at the College of San Mateo (CSM); Table 3 lists the mitigation measures required for the improvements at Skyline College.

This MMRP has been prepared by the District, with technical assistance from ICF International, an environmental consulting firm. Questions should be directed to Barbara Christensen at the District.

Contact Information:

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Table 1. Mitigation Monitoring Reporting Program – Summary of Mitigation Measures for Cañada College

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Monitoring Notes
To be Implemented Prior to Final Design			
CC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Cañada College	District and project architect	District	
CC-AES-3: Apply minimum lighting standards at Cañada College	District and project architect	District	
CC-AES-4: Remediate the potential for hazard glare at new Kinesiology/Wellness building at Cañada College	District and project architect	District	
CC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Cañada College and comply with recommendations	District and qualified engineer	District	
To be Implemented Prior to Construction			
CC-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at Cañada College	District and construction manager	District and BAAQMD	
CC-BIO-1: Implement special-status plant species avoidance and revegetation measures at Cañada College	District and qualified botanist	District	
CC-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at Cañada College	District and qualified wildlife biologist	District	No more than 3 days prior to ground-disturbing or building demolition activities during bird nesting season (Feb. 1-Aug. 31)
CC-BIO-3: Implement fringed myotis, pallid bat, and hoary bat avoidance measures at Cañada College	District and qualified wildlife biologist	District	No more than 7 days prior to the onset of site preparation
CC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Cañada College	Construction Contractor	District	

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Monitoring Notes
CC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Cañada College	Construction Contractor	District	
CC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Cañada College	District	District	
To be Implemented During Construction			
CC-AES-1: Limit exterior construction activities to daylight hours at Cañada College within 0.25 mile of residences	Construction Contractor	District	
CC-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at Cañada College	Construction Contractor	District	
CC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Cañada College	Construction Contractor	District and BAAQMD	
CC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Cañada College	Construction Contractor	District and BAAQMD	
CC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Cañada College	Construction Contractor	District and BAAQMD	
CC-CUL-1: Stop work if cultural resources are encountered during ground-disturbing activities at Cañada College	District and Construction Contractor	District and qualified archaeologist and Native American representative	

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Monitoring Notes
CC-CUL-2: Stop work if human remains are encountered during ground-disturbing activities at Cañada College	District and Construction Contractor	District and San Mateo County Coroner and Native American Heritage Commission	
CC-GEO-2: Stockpile topsoil removed during construction at Cañada College and reuse stockpiled topsoil during revegetation	Construction Contractor	District	
CC-GHG-1: Where feasible, implement BAAQMD's best management practices for GHG emissions at Cañada College	Construction Contractor	District	
CC-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at Cañada College	Construction Contractor	District	
CC-HAZ-4: Comply with legal requirements for fire prevention during construction activities at Cañada College	Construction Contractor	District	
CC-HYD-1: Implement erosion-control measures to protect water quality during construction at Cañada College	Construction Contractor	District	
CC-NOI-1: Employ noise-reducing construction practices at Cañada College	Construction Contractor	District	
CC-TRA-1: Implement a Traffic Control Plan during construction at Cañada College	Construction Contractor	District	

Note:

All references to "District" refer to the San Mateo County Community College District.

Table 2. Mitigation Monitoring Reporting Program – Summary of Mitigation Measures for the College of San Mateo (CSM)

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Monitoring Notes
To be Implemented Prior to Final Design			
CSM-AES-4: Apply minimum lighting standards at the College of San Mateo	District and project architect	District	
CSM-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at the College of San Mateo and comply with recommendations	District and qualified engineer	District	
To be Implemented Prior to Construction			
CSM-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at the College of San Mateo	Construction Contractor	District and BAAQMD	
CSM-BIO-1: Implement special-status plant species avoidance and revegetation measures at the College of San Mateo	District and qualified botanist	District	
CSM-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at the College of San Mateo	District and qualified wildlife biologist	District	No more than 3 days prior to ground-disturbing or building demolition activities during bird nesting season (Feb. 1-Aug. 31)
CSM-BIO-3: Implement fringed myotis, pallid bat, and hoary bat avoidance measures at the College of San Mateo	District and qualified wildlife biologist	District	No more than 7 days prior to the onset of site preparation
CSM-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at the College of San Mateo	Construction Contractor	District	

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Monitoring Notes
CSM-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at the College of San Mateo	Construction Contractor	District	
CSM-HYD-2: Design and maintain hydromodification features as postconstruction measures at the College of San Mateo	District	District	
To be Implemented During Construction			
CSM-AES-1: Limit exterior construction activities to daylight hours at the College of San Mateo within 0.25 mile of residences	Construction Contractor	District	
CSM-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo	Construction Contractor	District	
CSM-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo	Construction Contractor	District and BAAQMD	
CSM-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at the College of San Mateo	Construction Contractor	District and BAAQMD	
CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at College of San Mateo	Construction Contractor	District and BAAQMD	
CSM-AQE-6: Install filtration systems on ventilation and recirculation systems at the College of San Mateo	Construction Contractor	District and BAAQMD	
CSM-CUL-1: Stop work if cultural resources are encountered during ground-disturbing activities at the College of San Mateo	District and Construction Contractor	District and qualified archaeologist and Native American representative	

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Monitoring Notes
CSM-CUL-2: Stop work if human remains are encountered during ground-disturbing activities at the College of San Mateo	District and Construction Contractor	District and San Mateo County Coroner and Native American Heritage Commission	
CSM-GEO-2: Stockpile topsoil removed during construction at the College of San Mateo and reuse stockpiled topsoil during revegetation	Construction Contractor	District	
CSM-GHG-1: Where feasible, implement BAAQMD's best management practices for GHG emissions at College of San Mateo	Construction Contractor	District	
CSM-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at the College of San Mateo	Construction Contractor	District	
CSM-HAZ-4: Comply with legal requirements for fire prevention during construction activities at the College of San Mateo	Construction Contractor	District	
CSM-HYD-1: Implement erosion-control measures to protect water quality during construction at the College of San Mateo	Construction Contractor	District	
CSM-NOI-1: Employ noise-reducing construction practices at the College of San Mateo	Construction Contractor	District	
CSM-TRA-1: Implement a Traffic Control Plan during construction at the College of San Mateo	Construction Contractor	District	

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Monitoring Notes
To be Implemented During Project Operation			
CSM-HAZ-5: Create and maintain adequate firebreaks and practice fire prevention at the College of San Mateo	District	District and San Mateo Fire Department and/or CALFIRE	Ongoing

Note:

All references to "District" refer to the San Mateo County Community College District.

Table 3. Mitigation Monitoring Reporting Program – Summary of Mitigation Measures for Skyline College

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Monitoring Notes
To be Implemented Prior to Final Design			
SC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Skyline College	District and project architect	District	
SC-AES-3: Ensure new residential development blends with existing residential development at Skyline College	District and project architect	District and City of San Bruno	
SC-AES-4: Apply minimum lighting standards at Skyline College	District and project architect	District	
SC-BIO-4b: Avoid impacts on Mission blue butterfly habitat during construction of the Environmental Sciences building at Skyline College	District and qualified biologist	District	
SC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Skyline College and comply with recommendations	District and qualified engineer	District	
SC-LUP-1: Rezone Surplus Parcel B and amend the general plan land use designation to permit R-3 dwellings at Skyline College	District	District and City of San Bruno	
To be Implemented Prior to Construction			
SC-AQE-4: Offset NO_X Emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at Skyline College	District	District and BAAQMD	
SC-BIO-1: Implement special-status plant species avoidance and revegetation measures at Skyline College	District and qualified botanist	District	

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Monitoring Notes
SC-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at Skyline College	District and qualified wildlife biologist	District	No more than 3 days prior to ground-disturbing or building demolition activities during bird nesting season (Feb. 1-Aug. 31)
SC-BIO-3: Implement fringed myotis, pallid bat, and hoary bat avoidance measures at Skyline College	District and qualified wildlife biologist	District	No more than 7 days prior to the onset of site preparation
SC-BIO-4a: Conduct presence–absence survey for Mission blue butterfly at Skyline College	District and qualified biologist	District	Minimum of four site visits during the adult flight season (late March to early July), with at least 2 weeks between visits
SC-BIO-4c: Consult with the U.S. Fish and Wildlife Service if impacts on Mission blue butterfly habitat cannot be avoided	District and qualified botanist or biologist	District and USFWS	
SC-BIO-5: Implement tree avoidance, minimization, and replacement plan at the residential development site at Skyline College	District	District and City of San Bruno	
SC-GEO-3: Implement procedures for identifying, evaluating, and recovering paleontological resources at Skyline College	Construction Contractor and qualified paleontologist	District	
SC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Skyline College	Construction Contractor	District	
SC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Skyline College	Construction Contractor	District	

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Monitoring Notes
SC-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at Skyline College	District	District	
SC-NOI-2: Prepare a detailed noise reduction analysis at the potential housing development at Skyline College	District and Construction Contractor	District and City of San Bruno	
SC-PSU-1: Pay the fire and police services development impact fee to the City of San Bruno for Skyline College	District or Developer	District and City of San Bruno	
SC-PSU-2: Pay the San Bruno Park Elementary School District and San Mateo Union High School District school impact fees for Skyline College	District or Developer	District, San Bruno Park Elementary School District, and San Mateo Union High School District	
SC-PSU-3: Assess the capacity of the City's water and wastewater system infrastructure and pay the capacity fees for Skyline College	District or Developer	District and City of San Bruno	
SC-REC-1: Dedicate parkland and/or pay in-lieu fees to City of San Bruno for residential development at Skyline College	District or Developer	District and City of San Bruno	
To be Implemented During Construction			
SC-AES-1: Limit exterior construction activities to daylight hours at Skyline College within 0.25 mile of residences	Construction Contractor	District	
SC-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at Skyline College	Construction Contractor	District	
SC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Skyline College	Construction Contractor	District and BAAQMD	

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Monitoring Notes
SC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Skyline College	Construction Contractor	District and BAAQMD	
SC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Skyline College	Construction Contractor	District and BAAQMD	
SC-CUL-1: Stop work if cultural resources are encountered during ground-disturbing activities at Skyline College	District and Construction Contractor	District and qualified archaeologist and Native American representative	
SC-CUL-2: Stop work if human remains are encountered during ground-disturbing activities at Skyline College	District and Construction Contractor	District and San Mateo County Coroner and Native American Heritage Commission	
SC-GEO-2: Stockpile topsoil removed during construction at Skyline College and reuse stockpiled topsoil during revegetation	Construction Contractor	District	
SC-GHG-1: Where feasible, implement BAAQMD's best management practices for GHG emissions at Skyline College	Construction Contractor	District	
SC-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at Skyline College	Construction Contractor	District	
SC-HAZ-4: Comply with legal requirements for fire prevention during construction activities at Skyline College	Construction Contractor	District	

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Monitoring Notes
SC-HYD-1: Implement erosion-control measures to protect water quality during construction at Skyline College	Construction Contractor	District	
SC-NOI-1: Employ noise-reducing construction practices at Skyline College	Construction Contractor	District	
SC-TRA-1: Implement a Traffic Control Plan during construction at Skyline College	Construction Contractor	District	
To be Implemented During Project Operation			
SC-HAZ-5: Create and maintain adequate firebreaks and practice fire prevention at Skyline College	District	District and San Mateo Fire Department and/or CALFIRE	Ongoing

Note:

All references to "District" refer to the San Mateo County Community College District.

Cañada College

Aesthetics

Mitigation Measure CC-AES-1: Limit exterior construction activities to daylight hours at Cañada College within 0.25 mile of residences

The effect of nighttime construction light and glare on nearby residences will be minimized by limiting construction hours within 0.25 mile of residences. Construction activities, which are scheduled to take place between 6:00 am and 7:00 pm on weekdays, will be limited to daylight hours (which will vary according to season). Therefore, the construction hours will be adjusted during the seasons to ensure construction activities take place during daylight hours.

Mitigation Measure CC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Cañada College

Buildings associated with the Project to be located within scenic vista views will be designed in a manner that allows these features to blend with the surrounding built and natural environments so that these structures complement the visual landscape. The District will meet with the Town of Woodside Manager regarding the architecture of Building 1 at Cañada College. The following measures will be applied.

- Visible roofing materials will be selected to balance aesthetics with energy performance and compliance with codes and standards using a color shade that is visually cohesive with and darker than the general surrounding natural area. Colors may be chosen from the U.S. Department of the Interior Bureau of Land Management (BLM) Standard Environmental Colors Chart CC-001: June 2008. The building designer will employ the use of color panels as mock-ups which will be evaluated from key observation points during common lighting conditions (front versus backlighting) to aid in the appropriate color selection. Panels will be a minimum of 3 by 2 feet in dimension and will be evaluated from various distances, but within 1,000 feet, to ensure the best possible color selection. Color selection will be made for the coloring of the most prevalent season, and the intent is to match the panels to this surrounding coloring and pick a color that best fits. Choosing a shade that is darker will allow the surface to recede and blend within the visual landscape whereas a lighter color advances or is more apparent within the visual landscape.
- New building facades will be finished in earth tones to help buildings blend better within the natural setting. White and lighter beiges and tans, which would make buildings stand out and contrast against nearby darker tree canopies, will be avoided.

Mitigation Measure CC-AES-3: Apply minimum lighting standards at Cañada College

The District will implement an interior lighting policy for all new buildings that does the following:

- Building design would be required to include low-intensity interior safety lighting for use during afterhours. This practice would decrease the amount of nighttime light that would occur from using standard interior lighting as safety lighting.
- Use of interior lights to ensure building safety as required by code, but the unnecessary overuse of interior nighttime lighting would be prevented by requiring that interior spaces implement a "lights-off" policy. This practice requires that all non-safety lighting be turned off at night (such as in offices, classrooms, and hallways), after instructional hours. This may be accommodated by utilizing automatic motion sensor lighting that is programmed for use afterhours.
- Use of harsh mercury vapor or low-pressure sodium bulbs would be prohibited.

All artificial outdoor lighting will be limited to safety and security requirements, designed using Illuminating Engineering Society's design guidelines and in compliance with International Dark-Sky Association approved fixtures. All lighting is designed to have minimum impact on the surrounding environment and will use downcast, cut-off type fixtures that direct the light only towards objects requiring illumination. Shielding will be utilized, where needed, to ensure light pollution is minimized. Therefore, lights will be installed at the lowest allowable height and cast low-angle illumination while minimizing incidental light spill onto adjacent properties, open spaces, or backscatter into the nighttime sky. The lowest allowable illuminance level will be used for all lighted areas and the amount of nighttime lights needed to light an area will be minimized to the highest degree possible. Light fixtures will have non-glare finishes that will not cause reflective daytime glare. Lighting will be designed for energy efficiency and have daylight sensors or be timed with an on/off program. Lights will provide good color rendering with natural light qualities with the minimum intensity feasible for security, safety, and personnel access. Lighting, including light color rendering and fixture types, will be designed to be aesthetically pleasing.

LED lighting will avoid the use of blue-rich white light lamps and use a correlated color temperature that is no higher than 3,000 Kelvin (International Dark-Sky Association 2010a, 2010b, 2015). Wherever possible and pragmatic, the District will use fixtures and lighting control systems that conform to International Dark-Sky Associations Fixture Seal of Approval program. In addition, LED lights will use shielding to ensure nuisance glare and that light spill does not affect sensitive residential viewers.

Lights along pathways and safety lighting at building entrances and loading areas will employ shielding to minimize offsite light spill and glare and be screened and directed away from residences and adjacent uses to the highest degree possible. The amount of nighttime lights used along pathways will be minimized to the highest degree possible to ensure that spaces are not unnecessarily over-lit, while still maintaining minimum adequate lighting to provide necessary visibility for security. For example, the amount of light can be reduced by limiting the amount of ornamental light posts to higher use areas and by using hooded wall mounts or bollard lighting on travel way portions of pathways.

In particular, pool lighting will employ spill and glare control features to minimize off-site light pollution. Luminaires will be chosen for the ability to provide horizontal and vertical beam control for better control in directing what is illuminated. In addition, shielding, such as a visor, will be used to further direct light and reduce light spill and ambient light glow. Luminaires will also incorporate photometric reflector systems that are designed to reduce light pollution.

Technologies to reduce light pollution evolve over time and design measures that are currently available may help but may not be the most effective means of controlling light pollution once the Project is designed. Therefore, all design measures used to reduce light pollution will employ the technologies available at the time of Project design to allow for the highest potential reduction in light pollution.

Mitigation Measure CC-AES-4: Remediate the potential for hazard glare at new Kinesiology/Wellness building at Cañada College

Windows installed in the new Building 1, Kinesiology/Wellness, will be selected for their ability to minimize glare and specular highlighting. To the extent feasible, windows will be designed to effectively reduce the refractive index of protective glass windows.

Air Quality and Energy

Mitigation Measure CC-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at Cañada College

The District will ensure the construction contractor implements the following BAAQMD-recommended basic control measures to reduce NO_X emissions from construction equipment:

- Idling times will be minimized by shutting off equipment when it is not in use or by reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage will be provided for construction workers at all access points.
- All construction equipment will be maintained and properly tuned in accordance with manufacturer's specifications. All equipment will be checked by a certified mechanic and determined to be running in proper condition prior to operation.

Mitigation Measure CC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Cañada College

The District will ensure the construction contractor implements the following BAAQMD-recommended additional control measures to reduce NO_X emissions from construction equipment.

- Minimize the idling time of diesel powered construction equipment to 2 minutes.
- The project will develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction Project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20% NO_X reduction and 45% PM exhaust reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products,

alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.

- Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
- Require that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NO_X and PM.
- Require all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.

Mitigation Measure CC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Cañada College

The District will ensure that all off-road diesel-powered equipment used during construction at Cañada College is equipped with EPA Tier 4 or cleaner engines, except for specialized construction equipment for which an EPA Tier 4 engine is not available. The use of Tier 4 engines will also act to reduce ROG and NO_X emissions from construction equipment.

Mitigation Measure CC-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at Cañada College

The District will enter into a development mitigation contract with BAAQMD in order to reduce criteria pollutant emissions generated during construction of the Project to quantities below the numeric BAAQMD thresholds (Table 3.2-8). The preferred source of emissions reductions for NO_X, will be through contributions to BAAQMD's Carl Moyer Program and/or other BAAQMD incentive programs.

Implementation of this mitigation would require the District adopt the following specific responsibilities.

- Enter into a mitigation contract with BAAQMD for the Carl Moyer Program and/or other BAAQMD emission reduction incentive program. The necessary reductions must be achieved (contracted and delivered) by the applicable year in question (i.e., emissions generated in year 2016 would need to be reduced offsite in 2016). Funding would need to be received prior to contracting with participants and should allow sufficient time to receive and process applications to ensure offsite reduction projects are funded and implemented prior to commencement of Project activities being reduced. In negotiating the terms of the mitigation contract, the Project applicant and BAAQMD should seek clarification and agreement on BAAQMD responsibilities, including the following.
    - Identification of appropriate offsite mitigation fees required for the Project.
    - Timing required for obtaining necessary offsite emission credits.
    - Processing of mitigation fees paid by the Project applicant.
    - Verification of emissions inventories submitted by the Project applicant.
    - Verification that offsite fees are applied to appropriate mitigation programs within the SFBAA.

- Quantify mitigation fees required to satisfy the appropriate reductions. Funding for the emission reduction projects will be provided in an amount up to the emission reduction project cost-effectiveness limit set by for the Carl Moyer Program during the year that the emissions from construction are emitted. (The current Carl Moyer cost-effectiveness limit is $18,030 /weighted ton of criteria pollutants [NOX + ROG + (20*PM)]). An administrative fee of 5% would be paid by the Project applicant to the BAAQMD to implement the program. The funding would be used to fund projects eligible for funding under the Carl Moyer Program guidelines or other BAAQMD emission reduction incentive program meeting the same cost-effectiveness threshold that are real, surplus, quantifiable, and enforceable.
- Develop a compliance program to calculate emissions and collect fees from the construction contractors for payment to BAAQMD. The program will require, as a standard or specification of their construction contracts with the Project Sponsor, that construction contractors identify construction emissions and their share of required offsite fees, if applicable. Based on the emissions estimates, the Project applicant will collect fees from the individual construction contractors (as applicable) for payment to BAAQMD. Construction contractors will have the discretion to reduce their construction emissions to the lowest possible level through additional onsite mitigation, as the greater the emissions reductions that can be achieved by onsite mitigation, the lower the required offsite fee. Acceptable options for reducing emissions may include use of late-model engines, low-emission diesel products, additional electrification or alternative fuels, engine-retrofit technology, and/or after-treatment products. All control strategies must be verified by BAAQMD.
- Conduct daily and annual equipment activity monitoring to ensure onsite emissions reductions are achieved and no additional mitigation payments are required. Excess offsite funds can be carried from previous to subsequent years in the event that additional reductions are achieved by onsite mitigation. At the end of the Project, if it is determined that excess offset funds remain (outstanding contracts and administration over the final years of the contracts will be taken into consideration), BAAQMD and the Project applicant will determine the disposition of final funds (e.g., additional emission reduction projects to offset underperforming contracts, return of funds to the Project applicant, etc.).

Mitigation Measure CC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Cañada College

The District will require all construction contractors to implement the basic construction mitigation measures recommended by BAAQMD to reduce fugitive dust emissions. Emission reduction measures will include, at a minimum, the following measures. Additional measures may be identified by BAAQMD or the contractor as appropriate.

- All exposed surfaces affected by construction (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) will be watered two times per day, or as needed during the dry season(s) (unless limited by state or local drought response requirements or if there is a rain event).
- All haul trucks transporting soil, sand, or other loose material off site will be covered.

- All visible mud or dirt track-out onto adjacent public roads will be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads will be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved will be completed as soon as possible. Building pads will be laid as soon as possible after grading unless seeding or soil binders are used.
- A publicly visible sign will be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person will respond and take corrective action within 48 hours. BAAQMD's phone number will also be visible to ensure compliance with applicable regulations.

Biological Resources

Mitigation Measure CC-BIO-1: Implement special-status plant species avoidance and revegetation measures at Cañada College

Prior to construction, the District will retain a qualified botanist to survey any areas of proposed construction disturbance that contain suitable habitat for western leatherwood, fragrant fritillary, congested-headed hayfield tarplant, Choris' popcornflower, and showy Rancheria clover. The qualified botanist will survey appropriate areas of suitable habitat for the species during each species' blooming period (Table 3.3-2). Surveys will be conducted in accordance with CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (California Department of Fish and Game 2009).

If no special-status plants are identified during the design-period surveys, then no further action is necessary. If one or more special-status species is found within areas proposed for disturbance, then the occurrence will be avoided, if feasible. If avoidance is not possible, a revegetation and monitoring plan will be developed and executed by a qualified botanist retained by the District prior to ground disturbance that would affect the plants. The revegetation and monitoring plan will include the following components.

- Collection of seed prior to disturbance.
- Reseeding and revegetation on a site with suitable soils and exposure.
- Regular monitoring to evaluate the success of the reseeding and revegetation and remedial measures if necessary.

Details regarding specific monitoring protocols, success criteria, and the length of the monitoring program will be developed in coordination with and approved by the appropriate regulatory agencies.

Mitigation Measure CC-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at Cañada College

Prior to any construction activities scheduled during the bird nesting season (February 1 to August 31), the District will retain a qualified wildlife biologist with demonstrated nest-searching experience to conduct preconstruction surveys for nesting birds, including raptors. The preconstruction survey will occur no more than 3 days prior to the onset of ground disturbing activities (including clearing, grubbing, and staging). If active nests are found during the survey, no-disturbance species-specific buffer zones will be established by the biologist and marked with high-visibility fencing, flagging, or pin flags. No construction activities will be allowed within the buffer zones. The size of the buffer will be based on the species' sensitivity to disturbance and planned work activities in the vicinity; typical buffer sizes are 250 feet for raptors and 50 feet for other birds. The buffer will remain in effect until the nest is no longer active. If a lapse in Project-related activities of 15 days or longer occurs, another preconstruction survey will be conducted.

To the extent feasible, the District or its contractor will initiate building demolition outside of the nesting season to avoid impacts on active nests affixed to the structure before they become active during the nesting season (February 1 to August 31). If structure demolition activities cannot occur outside of the nesting season, the District or its contractor will remove inactive nests from the structure to be demolished and install nest exclusion measures (i.e., fine mesh netting, panels, or metal projectors) outside of the nesting season. All exclusionary devices will be monitored and maintained throughout the breeding season to ensure that they are successful in preventing the birds from accessing the cavities or nest sites. No more than 3 days prior to building demolition activities, a qualified biologist will conduct a preconstruction survey of all potential nesting habitat on the structure to be demolished and the surrounding areas for the presence of active nests. If active nests are found on the building or in the affected area, then demolition activities will not proceed until the biologist verifies that all nests on the building are inactive.

After all surveys and/or nest deterrence activities are completed, the biologist will complete a memorandum detailing the survey effort and results and submit the memorandum to the District within 7 days of survey completion.

Mitigation Measure CC-BIO-3: Implement fringed myotis, pallid bat, and hoary bat avoidance measures at Cañada College

Prior to the start of construction activities at sites offering suitable bat roosting habitat, the District will retain a qualified wildlife biologist with demonstrated bat field experience to conduct preconstruction surveys for fringed myotis, pallid bat, and hoary bat. Surveys will take place no more than 7 days prior to the onset of site preparation (e.g., tree removal) and construction activities with the potential to disturb bats or their habitat and will include close inspection of potential bat roosts, such as trees and any built features within the Project footprint.

If special-status bats are found in the footprint of a proposed improvement and avoidance of roosting areas is not possible, avoidance and minimization measures will be required if it is determined that bats are using the trees as roost sites and/or sensitive bat species are detected during acoustic monitoring. Appropriate measures will be determined in coordination with CDFW and may include the following measures.

- Tree removal will be avoided between April 15 and September 15 (the maternity period) to avoid impacts on pregnant females and active maternity roosts (whether colonial or solitary).
- All tree removal will be conducted between September 15 and October 30, which corresponds to a time period when bats have not yet entered torpor or would be caring for non-volant young.
- Trees will be removed in pieces, rather than felling the entire tree.
- If a maternity roost is located, whether solitary or colonial, that roost will remain undisturbed until September 15 or until a qualified biologist has determined the roost is no longer active.
- If avoidance of non-maternity roost trees is not possible, and tree removal or trimming must occur between September 15 and October 30, qualified biologists will monitor tree trimming/removal. Prior to removal/trimming, each tree will be gently shaken and several minutes should pass before felling trees or trimming limbs to allow bats time to arouse and leave the tree. The biologists should search downed vegetation for dead and injured bats. The presence of dead or injured bats that are species of special concern will be reported to CDFW.
- Compensatory mitigation for the loss of roosting habitat will also be determined through consultation with CDFW and may include the construction and installation of suitable replacement habitat (e.g., bat houses, planting cottonwood trees) onsite.

The District will be responsible for ensuring that CDFW requirements are implemented. Multiple survey visits and survey methods may be required at a single site to determine presence or absence of roosting bats depending on season and roost type.

Cultural Resources

Mitigation Measure CC-CUL-1: Stop work if cultural resources are encountered during ground-disturbing activities at Cañada College

The District will ensure the construction specifications include a stop work order if prehistoric or historic-period cultural materials are unearthed during ground-disturbing activities. All work within 100 feet of the find will be stopped until a qualified archaeologist and Native American representative can assess the significance of the find. Prehistoric materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool making debris; culturally darkened soil (midden) containing heat-affected rocks and artifacts; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered-stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. If the find is determined to be potentially significant, the archaeologist, in consultation with the Native American representative, will develop a treatment plan that could include site avoidance, capping, or data recovery.

Mitigation Measure CC-CUL-2: Stop work if human remains are encountered during ground-disturbing activities at Cañada College

The District will ensure the construction specifications include a stop work order if human remains are discovered during construction or demolition. There will be no further excavation or disturbance of the site within a 50-foot radius of the location of such discovery, or any nearby area reasonably suspected to overlie adjacent remains. The San Mateo County Coroner will be notified and will make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he will notify the Native American Heritage Commission, who will attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this state law, then the land owner will re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

Geology and Soils

Mitigation Measure CC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Cañada College and comply with recommendations

The District will have a qualified engineer prepare design-level geotechnical investigations for each Project element involving human occupation. The geotechnical investigation report will include recommendations to ensure the building is designed in accordance with the specifications of CGS Special Publication 117, *Guidelines for Evaluating and Mitigating Seismic Hazards*, and the requirements of the Seismic Hazards Mapping Act, which will minimize the structural damage and risk to humans from seismically induced groundshaking. The District and DSA will ensure that recommendations made in the geotechnical report will be implemented as part of the Project's design and construction.

Recommendations may include considerations for design of permanent below-grade walls to resist static lateral earth pressures, lateral pressures caused by seismic activity, and traffic loads; a method for backdraining walls to prevent the buildup of hydrostatic pressure; considerations for design of excavation shoring system; excavation monitoring; and seismic design.

Mitigation Measure CC-GEO-2: Stockpile topsoil removed during construction at Cañada College and reuse stockpiled topsoil during revegetation

The contractor(s) retained for construction and revegetation of the Project will stockpile excavated topsoil on disturbed areas within the campus boundaries (e.g., parking lot expansion areas) so that it can be reused for revegetation on the campus as needed. To ensure maximum topsoil recovery, topsoil will be stockpiled separately from other excavated materials and covered. Revegetation and landscaping will use stockpiled topsoil.

Greenhouse Gas Emissions

Mitigation Measure CC-GHG-1: Where feasible, implement BAAQMD's best management practices for GHG emissions at Cañada College

All construction contractors will implement the following BAAQMD-recommended best management practices (BMPs) to reduce GHG emissions, as applicable.

- Use alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment in at least 15% of the fleet.
- Use at least 10% local building materials.
- Recycle at least 50% of construction waste or demolition materials.

Hazards and Hazardous Materials

Mitigation Measure CC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Cañada College

The contractors will develop and implement a spill prevention, control, and countermeasure program (SPCCP) to minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities. The SPCCP will be completed before any construction or demolition activities begin. Implementation of this measure will comply with state and federal water quality regulations.

The District will review and approve the SPCCP before onset of construction activities. The District will routinely inspect the construction area to verify that the measures specified in the SPCCP are properly implemented and maintained. The District will notify its contractors immediately if there is a noncompliance issue and will require compliance.

The federal reportable spill quantity for petroleum products, as defined in 40 CFR 110, is any oil spill that includes any of the following.

- Violates applicable water quality standards.
- Causes a film or sheen on or discoloration of the water surface or adjoining shoreline.
- Causes a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.

If a spill is reportable, the contractors' superintendents will notify the District, and the District will take action to contact the appropriate safety and clean-up crews to ensure that the SPCCP is followed. A written description of reportable releases must be submitted to the San Francisco Bay Regional Water Quality Control Board. This submittal must contain a description of the spill, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred, and a description of the steps taken to prevent and control future releases. The releases would be documented on a spill report form.

If a reportable spill has occurred and results determine that Project activities have adversely affected surface water or groundwater quality, a detailed analysis will be performed by a registered

environmental assessor to identify the likely cause of contamination. This analysis will conform to American Society for Testing and Materials (ASTM) standards, and will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, the District and its contractors will select and implement measures to control contamination, with a performance standard that groundwater quality must be returned to baseline conditions. These measures will be subject to approval by the District.

Mitigation Measure CC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Cañada College

The construction specifications will include this measure to protect construction workers and/or the public from known or previously undiscovered soil and groundwater contamination during construction activities. Prior to excavation, a Site Safety Plan (soil and groundwater management plan) will be prepared and, at a minimum, include the following.

- A requirement that all construction activities involving work in proximity to potentially contaminated soils and/or groundwater be undertaken in accordance with California Occupational Safety and Health Administration (Cal OSHA) standards, contained in Title 8 of the CCR.
- Soil and groundwater mitigation and control specifications for construction activities, including health and safety provisions for monitoring exposure to construction workers, procedures to be undertaken in the event that previously unreported contamination is discovered, and emergency procedures and responsible personnel.
- Procedures for managing soils and groundwater removed from the site to ensure that any excavated soils and/or dewatered groundwater with contaminants are stored, managed, and disposed in accordance with applicable regulations.

Mitigation Measure CC-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at Cañada College

To protect construction workers and the public from known or undiscovered hazardous building materials, including asbestos and lead, all demolition activities will be undertaken in accordance with the California Occupational Safety and Health Administration (Cal OSHA) standards contained in Title 8 of the California Code of Regulations (CCR). During demolition activities, all building materials containing lead-based paint will be removed in accordance with Cal OSHA Lead in Construction Standard, Title 8, CCR 1532.1. All potentially friable asbestos-containing materials (ACMs) will be removed in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to building demolition or renovation that may disturb the materials. Applicable standards include the following.

- The facility will be inspected before any renovation occurs in which 160 square feet or more of building materials or 260 linear feet or more of pipe insulation will be disturbed at a regulated facility, or any demolition occurs at a regulated facility.

- An asbestos notification form will be submitted to the Bay Area Air Quality Management District for any regulated asbestos abatement Project or regulated demolition 10 working days before the activity begins.
- If ACMs are discovered during a renovation or demolition, they must be removed before the Project may proceed. Also, the Cal OSHA and California Environmental Protection Agency hazardous waste regulations apply in most cases.

Mitigation Measure CC-HAZ-4: Comply with legal requirements for fire prevention during construction activities at Cañada College

In accordance with the Public Resources Code (PRC), the construction contractor will comply with the following legal requirements during construction activities.

- Earthmoving and portable equipment with internal combustion engines will be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (PRC Section 4442).
- Appropriate fire suppression equipment will be maintained during the highest fire danger period: from April 1 to December 1 (PRC Section 4428).
- On days when a burning permit is required, flammable materials will be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor will maintain the appropriate fire suppression equipment (PRC Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines will not be used within 25 feet of any flammable materials (PRC Section 4431).

Hydrology and Water Quality

Mitigation Measure CC-HYD-1: Implement erosion-control measures to protect water quality during construction at Cañada College

The District will ensure the Project's construction specifications include the storm water pollution prevention plan (SWPPP) to minimize the mobilization of sediment to storm drains and adjacent water bodies. The SWPPP will include the following erosion- and sediment-control measures, based on standard industry measures and standard dust-reduction measures.

- Cover or apply nontoxic soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more) that could contribute sediment to waterways.
- Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways.
- Contain soil and filter runoff from disturbed areas by berms, vegetated filters, silt fencing, straw wattle, plastic sheeting, catch basins, or other means necessary to prevent the escape of sediment from the disturbed area.
- Prohibit the placement of earth or organic material where it may be directly carried into a stream, marsh, slough, lagoon, or body of standing water.

- Prohibit the following types of materials from being rinsed or washed into streets, shoulder areas, or gutters: concrete, solvents and adhesives, fuels, dirt, gasoline, asphalt, and concrete saw slurry.
- Conduct dewatering activities according to the provisions of the SWPPP.
- Prohibit placement of dewatered materials in local water bodies or in storm drains leading to such bodies without implementation of proper construction water quality control measures.

Mitigation Measure CC-HYD-2: Design and maintain hydromodification features as postconstruction measures at Cañada College

The District will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit the volume of additional stormwater runoff by matching postproject flows to preproject flows, and provide for onsite treatment of contaminants. These facility improvement areas will be open, level areas vegetated to allow runoff to be distributed evenly across the area. Generally, they will be designed to treat runoff by filtering raw runoff through the soil media in the treatment area to trap particulate pollutants (suspended solids and trace metals) and promote infiltration. However, alternative methods to treat runoff may be used, such as bio-filtration basins, underground detention and retention vaults or tanks, gravel beds, perforated pipes, stormwater chambers, pervious pavement, and green roofs that contain filtration media. Project areas will be designed to treat runoff so that pollutants (e.g., sediment, landscape fertilizers and/or pesticides, oil from parking areas) can be filtered out and, therefore, the Project will not contribute a substantial number of additional pollutants to runoff.

Maintenance of these features will be performed routinely to prevent sediment buildup and clogging in order to ensure optimal pollutant removal efficiency. Maintenance activities will include those listed below and would be done periodically.

- Remove obstructions, debris and trash and dispose of properly.
- Inspect to ensure proper drainage between storms and within 5 days following measurable rainfall.
- Inspect inlets for channels, soil exposure, or other evidence of erosion.
- Remove obstructions and sediment.
- Maintain vegetation via pruning and weeding, and treat with preventative and low-toxic methods.
- Check that mulch is maintained at an appropriate depth and replenish as necessary.
- Use soil that meets specifications included in the SMCWPPP C.3 Stormwater Technical Guidance Manual, or comparable document. Specifically, soils must percolate at a rate of 5 to 10 inches per hour.

A facility improvement area inspection and maintenance checklist will be used to conduct inspections, identify needed maintenance, and record maintenance that is conducted. Operation of the hydromodification features is expected to improve the quality of stormwater from the Project site. Maintenance of these areas would help eliminate or minimize impacts on stormwater quality.

Noise

Mitigation Measure CC-NOI-1: Employ noise-reducing construction practices at Cañada College

If construction work must be conducted between the hours of 6:00 p.m. and 7:00 a.m. weekdays, 5:00 p.m. and 9:00 a.m. on Saturdays, or at any time on Sundays, Thanksgiving and Christmas, the District will require the contractor to employ noise-reducing construction practices limit noise to be in compliance with the county noise standards specified in Table 3.10-1. Measures that can be used to limit noise include those listed below.

- Locating equipment as far as feasible from noise sensitive uses.
- Requiring that all construction equipment powered by gasoline or diesel engines have sound-control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation.
- Not allowing idling inactive construction equipment for prolonged periods (i.e., more than 2 minutes).
- Prohibiting gasoline or diesel engines from having unmuffled exhaust.
- Scheduling construction activities and material hauling that may affect traffic flow to off-peak hours and using routes that would affect the fewest number of people.
- Using noise-reducing enclosures around noise-generating equipment.
- Constructing temporary barriers between noise sources and noise-sensitive land uses or taking advantage of existing barrier features (terrain, structures) to block sound transmission.

Transportation and Traffic

Mitigation Measure CC-TRA-1: Implement a Traffic Control Plan during construction at Cañada College

The District will require the construction contractor(s) to develop a traffic control plan, as appropriate, to minimize the effects of construction traffic on the surrounding area. (A traffic control plan may not be required for minor construction activities.) The plan will be subject to review and approval by the District. The District will be responsible for monitoring to ensure that the plan is effectively implemented by the construction contractor(s). The construction traffic control plan will include the following requirements.

- Provide clearly marked pedestrian detours if any sidewalk or pedestrian walkway closures are necessary.
- Provide clearly marked bicycle detours if heavily used bicycle routes must be closed, or if bicyclist safety might be otherwise compromised.
- Provide crossing guards and/or flag persons as needed to avoid traffic conflicts and ensure pedestrian and bicyclist safety.
- Use nonskid traffic plates over open trenches to minimize hazards.

- Locate all stationary equipment as far away as possible from areas used heavily by vehicles, bicyclists, and pedestrians.
- Notify and consult with emergency service providers and provide emergency access by whatever means necessary to expedite and facilitate the passage of emergency vehicles.
- Avoid routing construction traffic through residential areas to the extent feasible. Prohibit mobilization and demobilization of heavy construction equipment during AM and PM peak traffic hours.
- Provide access for driveways and private roads outside the immediate construction zone by using steel plates or temporary backfill, as necessary.
- Prohibit construction worker parking in residential areas.

College of San Mateo

Aesthetics

Mitigation Measure CSM-AES-1: Limit exterior construction activities to daylight hours at the College of San Mateo within 0.25 mile of residences

The effect of nighttime construction light and glare on nearby residences will be minimized by limiting construction hours within 0.25 mile of residences. Construction activities, which are scheduled to take place between 6:00 am and 7:00 pm on weekdays, will be limited to daylight hours (which will vary according to season). Therefore, the construction hours will be adjusted during the seasons to ensure construction activities take place during daylight hours.

Mitigation Measure CSM-AES-4: Apply minimum lighting standards at the College of San Mateo

The District will implement an interior lighting policy for all new buildings that does the following:

- Building design would be required to include low-intensity interior safety lighting for use during afterhours. This practice would decrease the amount of nighttime light that would occur from using standard interior lighting as safety lighting.
- Use of interior lights to ensure building safety as required by code, but the unnecessary overuse of interior nighttime lighting would be prevented by requiring that interior spaces implement a “lights-off” policy. This practice requires that all non-safety lighting be turned off at night (such as in offices, classrooms, and hallways), after instructional hours. This may be accommodated by utilizing automatic motion sensor lighting that is programmed for use afterhours.
- Use of harsh mercury vapor or low-pressure sodium bulbs would be prohibited.

All artificial outdoor lighting will be limited to safety and security requirements, designed using Illuminating Engineering Society's design guidelines and in compliance with International Dark-Sky Association approved fixtures. All lighting is designed to have minimum impact on the surrounding environment and will use downcast, cut-off type fixtures that direct the light only towards objects requiring illumination. Shielding will be utilized, where needed, to ensure light pollution is minimized. Therefore, lights will be installed at the lowest allowable height and cast low-angle illumination while minimizing incidental light spill onto adjacent properties, open spaces, or backscatter into the nighttime sky. The lowest allowable illuminance level will be used for all lighted areas and the amount of nighttime lights needed to light an area will be minimized to the highest degree possible. Light fixtures will have non-glare finishes that will not cause reflective daytime glare. Lighting will be designed for energy efficiency and have daylight sensors or be timed with an on/off program. Lights will provide good color rendering with natural light qualities with the minimum intensity feasible for security, safety, and personnel access. Lighting, including light color rendering and fixture types, will be designed to be aesthetically pleasing.

LED lighting will avoid the use of blue-rich white light lamps and use a correlated color temperature that is no higher than 3,000 Kelvin (International Dark-Sky Association 2010a, 2010b, 2015). Wherever possible and pragmatic, the District will use fixtures and lighting control systems that conform to International Dark-Sky Associations Fixture Seal of Approval program. In addition, LED lights will use shielding to ensure nuisance glare and that light spill does not affect sensitive residential viewers.

Lights along pathways and safety lighting at building entrances and loading areas will employ shielding to minimize offsite light spill and glare and be screened and directed away from residences and adjacent uses to the highest degree possible. The amount of nighttime lights used along pathways will be minimized to the highest degree possible to ensure that spaces are not unnecessarily over-lit, while still maintaining minimum adequate lighting to provide necessary visibility for security. For example, the amount of light can be reduced by limiting the amount of ornamental light posts to higher use areas and by using hooded wall mounts or bollard lighting on travel way portions of pathways.

In particular, pool lighting will employ spill and glare control features to minimize off-site light pollution. Luminaires will be chosen for the ability to provide horizontal and vertical beam control for better control in directing what is illuminated. In addition, shielding, such as a visor, will be used to further direct light and reduce light spill and ambient light glow. Luminaires will also incorporate photometric reflector systems that are designed to reduce light pollution.

Air Quality and Energy

Mitigation Measure CSM-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo

The District will ensure the construction contractor implements the following BAAQMD-recommended basic control measures to reduce NO_X emissions from construction equipment:

- Idling times will be minimized by shutting off equipment when it is not in use or by reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control

measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage will be provided for construction workers at all access points.

- All construction equipment will be maintained and properly tuned in accordance with manufacturer's specifications. All equipment will be checked by a certified mechanic and determined to be running in proper condition prior to operation.

Mitigation Measure CSM-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo

The District will ensure the construction contractor implements the following BAAQMD-recommended additional control measures to reduce NO_X emissions from construction equipment.

- Minimize the idling time of diesel powered construction equipment to 2 minutes.
- The project will develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction Project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20% NO_X reduction and 45% PM exhaust reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
- Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
- Require that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NO_X and PM.
- Require all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.

Mitigation Measure CSM-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at the College of San Mateo

The District will ensure that all off-road diesel-powered equipment used during construction at Cañada College is equipped with EPA Tier 4 or cleaner engines, except for specialized construction equipment for which an EPA Tier 4 engine is not available. The use of Tier 4 engines will also act to reduce ROG and NO_X emissions from construction equipment.

Mitigation Measure CSM-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at the College of San Mateo

The District will enter into a development mitigation contract with BAAQMD in order to reduce criteria pollutant emissions generated during construction of the Project to quantities below the numeric BAAQMD thresholds (Table 3.2-8). The preferred source of emissions reductions for NO_X, will be through contributions to BAAQMD's Carl Moyer Program and/or other BAAQMD incentive programs.

Implementation of this mitigation would require the District adopt the following specific responsibilities.

- Enter into a mitigation contract with BAAQMD for the Carl Moyer Program and/or other BAAQMD emission reduction incentive program. The necessary reductions must be achieved (contracted and delivered) by the applicable year in question (i.e., emissions generated in year 2016 would need to be reduced offsite in 2016). Funding would need to be received prior to contracting with participants and should allow sufficient time to receive and process applications to ensure offsite reduction projects are funded and implemented prior to commencement of Project activities being reduced. In negotiating the terms of the mitigation contract, the Project applicant and BAAQMD should seek clarification and agreement on BAAQMD responsibilities, including the following.
    - Identification of appropriate offsite mitigation fees required for the Project.
    - Timing required for obtaining necessary offsite emission credits.
    - Processing of mitigation fees paid by the Project applicant.
    - Verification of emissions inventories submitted by the Project applicant.
    - Verification that offsite fees are applied to appropriate mitigation programs within the SFBAA.
- Quantify mitigation fees required to satisfy the appropriate reductions. Funding for the emission reduction projects will be provided in an amount up to the emission reduction project cost-effectiveness limit set by for the Carl Moyer Program during the year that the emissions from construction are emitted. (The current Carl Moyer cost-effectiveness limit is $18,030 /weighted ton of criteria pollutants [NOX + ROG + (20*PM)]). An administrative fee of 5% would be paid by the Project applicant to the BAAQMD to implement the program. The funding would be used to fund projects eligible for funding under the Carl Moyer Program guidelines or other BAAQMD emission reduction incentive program meeting the same cost-effectiveness threshold that are real, surplus, quantifiable, and enforceable.
- Develop a compliance program to calculate emissions and collect fees from the construction contractors for payment to BAAQMD. The program will require, as a standard or specification of their construction contracts with the Project Sponsor, that construction contractors identify construction emissions and their share of required offsite fees, if applicable. Based on the emissions estimates, the Project applicant will collect fees from the individual construction contractors (as applicable) for payment to BAAQMD. Construction contractors will have the discretion to reduce their construction emissions to the lowest possible level through additional onsite mitigation, as the greater the emissions reductions that can be achieved by onsite mitigation, the lower the required offsite fee. Acceptable options for reducing emissions may include use of late-model engines, low-emission diesel products, additional electrification or alternative fuels, engine-retrofit technology, and/or after-treatment products. All control strategies must be verified by BAAQMD.
- Conduct daily and annual equipment activity monitoring to ensure onsite emissions reductions are achieved and no additional mitigation payments are required. Excess offsite funds can be carried from previous to subsequent years in the event that additional reductions are achieved by onsite mitigation. At the end of the Project, if it is determined

that excess offset funds remain (outstanding contracts and administration over the final years of the contracts will be taken into consideration), BAAQMD and the Project applicant will determine the disposition of final funds (e.g., additional emission reduction projects to offset underperforming contracts, return of funds to the Project applicant, etc.).

Mitigation Measure CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at the College of San Mateo

The District will require all construction contractors to implement the basic construction mitigation measures recommended by BAAQMD to reduce fugitive dust emissions. Emission reduction measures will include, at a minimum, the following measures. Additional measures may be identified by BAAQMD or the contractor as appropriate.

- All exposed surfaces affected by construction (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) will be watered two times per day, or as needed during the dry season(s) (unless limited by state or local drought response requirements or if there is a rain event).
- All haul trucks transporting soil, sand, or other loose material off site will be covered.
- All visible mud or dirt track-out onto adjacent public roads will be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads will be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved will be completed as soon as possible. Building pads will be laid as soon as possible after grading unless seeding or soil binders are used.
- A publicly visible sign will be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person will respond and take corrective action within 48 hours. BAAQMD's phone number will also be visible to ensure compliance with applicable regulations.

Mitigation Measure CSM-AQE-6: Install filtration systems on ventilation and recirculation systems at the College of San Mateo

The District will install filtration systems on ventilation and recirculation systems within onsite residences where the BAAQMD PM2.5 concentration thresholds are exceeded after application of other onsite construction air quality mitigation measures. All filters must be rated MERV-15 or higher. The District will submit a plan for installation and maintenance of all filters in accordance with the manufacturer's recommendations to the County prior to approval of the first building permits. The onsite plans will be incorporated into the Project's Operations and Maintenance Manual.

In the event that background community risks change due to new or removed sources, revised modeling will be required before changes to the filtration system can be incorporated into the building design. The modeling would be included in a proposal submitted to the County for review and approval prior to issuance of building permits.

Biological Resources

Mitigation Measure CSM-BIO-1: Implement special-status plant species avoidance and revegetation measures at the College of San Mateo

Prior to construction, the District will retain a qualified botanist to survey any areas of proposed construction disturbance that contain suitable habitat for western leatherwood, fragrant fritillary, congested-headed hayfield tarplant, Choris' popcornflower, and showy Rancheria clover. The qualified botanist will survey appropriate areas of suitable habitat for the species during each species' blooming period (Table 3.3-2). Surveys will be conducted in accordance with CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (California Department of Fish and Game 2009).

If no special-status plants are identified during the design-period surveys, then no further action is necessary. If one or more special-status species is found within areas proposed for disturbance, then the occurrence will be avoided, if feasible. If avoidance is not possible, a revegetation and monitoring plan will be developed and executed by a qualified botanist retained by the District prior to ground disturbance that would affect the plants. The revegetation and monitoring plan will include the following components.

- Collection of seed prior to disturbance.
- Reseeding and revegetation on a site with suitable soils and exposure.
- Regular monitoring to evaluate the success of the reseeding and revegetation and remedial measures if necessary.

Details regarding specific monitoring protocols, success criteria, and the length of the monitoring program will be developed in coordination with and approved by the appropriate regulatory agencies.

Mitigation Measure CSM-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at the College of San Mateo

Prior to any construction activities scheduled during the bird nesting season (February 1 to August 31), the District will retain a qualified wildlife biologist with demonstrated nest-searching experience to conduct preconstruction surveys for nesting birds, including raptors. The preconstruction survey will occur no more than 3 days prior to the onset of ground disturbing activities (including clearing, grubbing, and staging). If active nests are found during the survey, no-disturbance species-specific buffer zones will be established by the biologist and marked with high-visibility fencing, flagging, or pin flags. No construction activities will be allowed within the buffer zones. The size of the buffer will be based on the species' sensitivity to disturbance and planned work activities in the vicinity; typical buffer sizes are 250 feet for raptors and 50 feet for other birds. The buffer will remain in effect until the nest is no longer active. If a lapse in Project-related activities of 15 days or longer occurs, another preconstruction survey will be conducted.

To the extent feasible, the District or its contractor will initiate building demolition outside of the nesting season to avoid impacts on active nests affixed to the structure before they become active during the nesting season (February 1 to August 31). If structure demolition activities cannot occur

outside of the nesting season, the District or its contractor will remove inactive nests from the structure to be demolished and install nest exclusion measures (i.e., fine mesh netting, panels, or metal projectors) outside of the nesting season. All exclusionary devices will be monitored and maintained throughout the breeding season to ensure that they are successful in preventing the birds from accessing the cavities or nest sites. No more than 3 days prior to building demolition activities, a qualified biologist will conduct a preconstruction survey of all potential nesting habitat on the structure to be demolished and the surrounding areas for the presence of active nests. If active nests are found on the building or in the affected area, then demolition activities will not proceed until the biologist verifies that all nests on the building are inactive.

After all surveys and/or nest deterrence activities are completed, the biologist will complete a memorandum detailing the survey effort and results and submit the memorandum to the District within 7 days of survey completion.

Mitigation Measure CSM-BIO-3: Implement fringed myotis, pallid bat, and hoary bat avoidance measures at the College of San Mateo

Prior to the start of construction activities at sites offering suitable bat roosting habitat, the District will retain a qualified wildlife biologist with demonstrated bat field experience to conduct preconstruction surveys for fringed myotis, pallid bat, and hoary bat. Surveys will take place no more than 7 days prior to the onset of site preparation (e.g., tree removal) and construction activities with the potential to disturb bats or their habitat and will include close inspection of potential bat roosts, such as trees and any built features within the Project footprint.

If special-status bats are found in the footprint of a proposed improvement and avoidance of roosting areas is not possible, avoidance and minimization measures will be required if it is determined that bats are using the trees as roost sites and/or sensitive bat species are detected during acoustic monitoring. Appropriate measures will be determined in coordination with CDFW and may include the following measures.

- Tree removal will be avoided between April 15 and September 15 (the maternity period) to avoid impacts on pregnant females and active maternity roosts (whether colonial or solitary).
- All tree removal will be conducted between September 15 and October 30, which corresponds to a time period when bats have not yet entered torpor or would be caring for non-volant young.
- Trees will be removed in pieces, rather than felling the entire tree.
- If a maternity roost is located, whether solitary or colonial, that roost will remain undisturbed until September 15 or until a qualified biologist has determined the roost is no longer active.
- If avoidance of non-maternity roost trees is not possible, and tree removal or trimming must occur between September 15 and October 30, qualified biologists will monitor tree trimming/removal. Prior to removal/trimming, each tree will be gently shaken and several minutes should pass before felling trees or trimming limbs to allow bats time to arouse and leave the tree. The biologists should search downed vegetation for dead and injured bats. The presence of dead or injured bats that are species of special concern will be reported to CDFW.

- Compensatory mitigation for the loss of roosting habitat will also be determined through consultation with CDFW and may include the construction and installation of suitable replacement habitat (e.g., bat houses, planting cottonwood trees) onsite.

The District will be responsible for ensuring that CDFW requirements are implemented. Multiple survey visits and survey methods may be required at a single site to determine presence or absence of roosting bats depending on season and roost type.

Cultural Resources

Mitigation Measure CSM-CUL-1: Stop work if cultural resources are encountered during ground-disturbing activities at the College of San Mateo

The District will ensure the construction specifications include a stop work order if prehistoric or historic-period cultural materials are unearthed during ground-disturbing activities. All work within 100 feet of the find will be stopped until a qualified archaeologist and Native American representative can assess the significance of the find. Prehistoric materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool making debris; culturally darkened soil (midden) containing heat-affected rocks and artifacts; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered-stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. If the find is determined to be potentially significant, the archaeologist, in consultation with the Native American representative, will develop a treatment plan that could include site avoidance, capping, or data recovery.

Mitigation Measure CSM-CUL-2: Stop work if human remains are encountered during ground-disturbing activities at the College of San Mateo

The District will ensure the construction specifications include a stop work order if human remains are discovered during construction or demolition. There will be no further excavation or disturbance of the site within a 50-foot radius of the location of such discovery, or any nearby area reasonably suspected to overlie adjacent remains. The San Mateo County Coroner will be notified and will make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he will notify the Native American Heritage Commission, who will attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this state law, then the land owner will re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

Geology and Soils

Mitigation Measure CSM-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at the College of San Mateo and comply with recommendations

The District will have a qualified engineer prepare design-level geotechnical investigations for each Project element involving human occupation. The geotechnical investigation report will include recommendations to ensure the building is designed in accordance with the specifications of CGS Special Publication 117, *Guidelines for Evaluating and Mitigating Seismic Hazards*, and the requirements of the Seismic Hazards Mapping Act, which will minimize the structural damage and risk to humans from seismically induced groundshaking. The District and DSA will ensure that recommendations made in the geotechnical report will be implemented as part of the Project's design and construction.

Recommendations may include considerations for design of permanent below-grade walls to resist static lateral earth pressures, lateral pressures caused by seismic activity, and traffic loads; a method for backdraining walls to prevent the buildup of hydrostatic pressure; considerations for design of excavation shoring system; excavation monitoring; and seismic design.

Mitigation Measure CSM-GEO-2: Stockpile topsoil removed during construction at the College of San Mateo and reuse stockpiled topsoil during revegetation

The contractor(s) retained for construction and revegetation of the Project will stockpile excavated topsoil on disturbed areas within the campus boundaries (e.g., parking lot expansion areas) so that it can be reused for revegetation on the campus as needed. To ensure maximum topsoil recovery, topsoil will be stockpiled separately from other excavated materials and covered. Revegetation and landscaping will use stockpiled topsoil.

Greenhouse Gas Emissions

Mitigation Measure CSM-GHG-1: Where feasible, implement BAAQMD's best management practices for GHG emissions at the College of San Mateo

All construction contractors will implement the following BAAQMD-recommended best management practices (BMPs) to reduce GHG emissions, as applicable.

- Use alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment in at least 15% of the fleet.
- Use at least 10% local building materials.
- Recycle at least 50% of construction waste or demolition materials.

Hazards and Hazardous Materials

Mitigation Measure CSM-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at the College of San Mateo

The contractors will develop and implement a spill prevention, control, and countermeasure program (SPCCP) to minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities. The SPCCP will be completed before any construction or demolition activities begin. Implementation of this measure will comply with state and federal water quality regulations.

The District will review and approve the SPCCP before onset of construction activities. The District will routinely inspect the construction area to verify that the measures specified in the SPCCP are properly implemented and maintained. The District will notify its contractors immediately if there is a noncompliance issue and will require compliance.

The federal reportable spill quantity for petroleum products, as defined in 40 CFR 110, is any oil spill that includes any of the following.

- Violates applicable water quality standards.
- Causes a film or sheen on or discoloration of the water surface or adjoining shoreline.
- Causes a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.

If a spill is reportable, the contractors' superintendents will notify the District, and the District will take action to contact the appropriate safety and clean-up crews to ensure that the SPCCP is followed. A written description of reportable releases must be submitted to the San Francisco Bay Regional Water Quality Control Board. This submittal must contain a description of the spill, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred, and a description of the steps taken to prevent and control future releases. The releases would be documented on a spill report form.

If a reportable spill has occurred and results determine that Project activities have adversely affected surface water or groundwater quality, a detailed analysis will be performed by a registered environmental assessor to identify the likely cause of contamination. This analysis will conform to American Society for Testing and Materials (ASTM) standards, and will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, the District and its contractors will select and implement measures to control contamination, with a performance standard that groundwater quality must be returned to baseline conditions. These measures will be subject to approval by the District.

Mitigation Measure CSM-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at the College of San Mateo

The construction specifications will include this measure to protect construction workers and/or the public from known or previously undiscovered soil and groundwater contamination during

construction activities. Prior to excavation, a Site Safety Plan (soil and groundwater management plan) will be prepared and, at a minimum, include the following.

- A requirement that all construction activities involving work in proximity to potentially contaminated soils and/or groundwater be undertaken in accordance with California Occupational Safety and Health Administration (Cal OSHA) standards, contained in Title 8 of the CCR.
- Soil and groundwater mitigation and control specifications for construction activities, including health and safety provisions for monitoring exposure to construction workers, procedures to be undertaken in the event that previously unreported contamination is discovered, and emergency procedures and responsible personnel.
- Procedures for managing soils and groundwater removed from the site to ensure that any excavated soils and/or dewatered groundwater with contaminants are stored, managed, and disposed in accordance with applicable regulations.

Mitigation Measure CSM-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at the College of San Mateo

To protect construction workers and the public from known or undiscovered hazardous building materials, including asbestos and lead, all demolition activities will be undertaken in accordance with the California Occupational Safety and Health Administration (Cal OSHA) standards contained in Title 8 of the California Code of Regulations (CCR). During demolition activities, all building materials containing lead-based paint will be removed in accordance with Cal OSHA Lead in Construction Standard, Title 8, CCR 1532.1. All potentially friable asbestos-containing materials (ACMs) will be removed in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to building demolition or renovation that may disturb the materials. Applicable standards include the following.

- The facility will be inspected before any renovation occurs in which 160 square feet or more of building materials or 260 linear feet or more of pipe insulation will be disturbed at a regulated facility, or any demolition occurs at a regulated facility.
- An asbestos notification form will be submitted to the Bay Area Air Quality Management District for any regulated asbestos abatement Project or regulated demolition 10 working days before the activity begins.
- If ACMs are discovered during a renovation or demolition, they must be removed before the Project may proceed. Also, the Cal OSHA and California Environmental Protection Agency hazardous waste regulations apply in most cases.

Mitigation Measure CSM-HAZ-4: Comply with legal requirements for fire prevention during construction activities at the College of San Mateo

In accordance with the Public Resources Code (PRC), the construction contractor will comply with the following legal requirements during construction activities.

- Earthmoving and portable equipment with internal combustion engines will be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (PRC Section 4442).
- Appropriate fire suppression equipment will be maintained during the highest fire danger period: from April 1 to December 1 (PRC Section 4428).
- On days when a burning permit is required, flammable materials will be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor will maintain the appropriate fire suppression equipment (PRC Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines will not be used within 25 feet of any flammable materials (PRC Section 4431).

Mitigation Measure CSM-HAZ-5: Create and maintain adequate firebreaks and practice fire prevention at the College of San Mateo

The District will comply with the following measures for the duration of Project operations.

- Maintain around and adjacent to buildings and structures a firebreak made by removing and clearing away, for a distance of 100 feet as required by PRC 4290, all flammable vegetation or other combustible growth.
- Maintain around and adjacent to the project facilities additional fire protection or firebreak made by removing all brush, flammable vegetation, or combustible growth that is located within 100 feet of the structures or to the property line, whichever is nearer. Grass and other vegetation located more than 30 feet from the structures and less than 18 inches in height above the ground may be maintained where necessary to stabilize the soil and prevent erosion.
- Provide prior to project operations and maintain at all times a screen over the outlet of every chimney or stack that is attached to any device that burns any solid or liquid fuel. The screen will be constructed of nonflammable material with openings not larger than 0.5 inch.
- Prior to occupancy, install fire extinguishers.
- Employees will be trained in using extinguishers and communicating with the San Mateo Fire Department.
- The San Mateo Fire Department and/or CALFIRE will periodically inspect the project area.
- Provide the San Mateo Fire Department and/or CALFIRE access to onsite water storage tanks, if such access is needed.

Hydrology and Water Quality

Mitigation Measure CSM-HYD-1: Implement erosion-control measures to protect water quality during construction at the College of San Mateo

The District will ensure the Project's construction specifications include the storm water pollution prevention plan (SWPPP) to minimize the mobilization of sediment to storm drains and adjacent water bodies. The SWPPP will include the following erosion- and sediment-control measures, based on standard industry measures and standard dust-reduction measures.

- Cover or apply nontoxic soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more) that could contribute sediment to waterways.
- Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways.
- Contain soil and filter runoff from disturbed areas by berms, vegetated filters, silt fencing, straw wattle, plastic sheeting, catch basins, or other means necessary to prevent the escape of sediment from the disturbed area.
- Prohibit the placement of earth or organic material where it may be directly carried into a stream, marsh, slough, lagoon, or body of standing water.
- Prohibit the following types of materials from being rinsed or washed into streets, shoulder areas, or gutters: concrete, solvents and adhesives, fuels, dirt, gasoline, asphalt, and concrete saw slurry.
- Conduct dewatering activities according to the provisions of the SWPPP.
- Prohibit placement of dewatered materials in local water bodies or in storm drains leading to such bodies without implementation of proper construction water quality control measures.

Mitigation Measure CSM-HYD-2: Design and maintain hydromodification features as postconstruction measures at the College of San Mateo

The District will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit the volume of additional stormwater runoff by matching post-project flows to pre-project flows, and provide for onsite treatment of contaminants. These facility improvement areas will be open, level areas vegetated to allow runoff to be distributed evenly across the area. Generally, they will be designed to treat runoff by filtering raw runoff through the soil media in the treatment area to trap particulate pollutants (suspended solids and trace metals) and promote infiltration. However, alternative methods to treat runoff may be used, such as bio-filtration basins, underground detention and retention vaults or tanks, gravel beds, perforated pipes, stormwater chambers, pervious pavement, and green roofs that contain filtration media. Project areas will be designed to treat runoff so that pollutants (e.g., sediment, landscape fertilizers and/or pesticides, oil from parking areas) can be filtered out and, therefore, the Project will not contribute a substantial number of additional pollutants to runoff.

Maintenance of these features will be performed routinely to prevent sediment buildup and clogging in order to ensure optimal pollutant removal efficiency. Maintenance activities will include those listed below and would be done periodically.

- Remove obstructions, debris and trash and dispose of properly.
- Inspect to ensure proper drainage between storms and within 5 days following measurable rainfall.
- Inspect inlets for channels, soil exposure, or other evidence of erosion.
- Remove obstructions and sediment.
- Maintain vegetation via pruning and weeding, and treat with preventative and low-toxic methods.
- Check that mulch is maintained at an appropriate depth and replenish as necessary.
- Use soil that meets specifications included in the SMCWPPP C.3 Stormwater Technical Guidance Manual, or comparable document. Specifically, soils must percolate at a rate of 5 to 10 inches per hour.

A facility improvement area inspection and maintenance checklist will be used to conduct inspections, identify needed maintenance, and record maintenance that is conducted. Operation of the hydromodification features is expected to improve the quality of stormwater from the Project site. Maintenance of these areas would help eliminate or minimize impacts on stormwater quality.

Noise

Mitigation Measure CSM-NOI-1: Employ noise-reducing construction practices at the College of San Mateo

If construction work must be conducted between the hours of 6:00 p.m. and 7:00 a.m. weekdays, 5:00 p.m. and 9:00 a.m. on Saturdays, or at any time on Sundays, Thanksgiving and Christmas, the District will require the contractor to employ noise-reducing construction practices limit noise to be in compliance with the county noise standards specified in Table 3.10-1. Measures that can be used to limit noise include those listed below.

- Locating equipment as far as feasible from noise sensitive uses.
- Requiring that all construction equipment powered by gasoline or diesel engines have sound-control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation.
- Not allowing idling inactive construction equipment for prolonged periods (i.e., more than 2 minutes).
- Prohibiting gasoline or diesel engines from having unmuffled exhaust.
- Scheduling construction activities and material hauling that may affect traffic flow to off-peak hours and using routes that would affect the fewest number of people.

- Using noise-reducing enclosures around noise-generating equipment.
- Constructing temporary barriers between noise sources and noise-sensitive land uses or taking advantage of existing barrier features (terrain, structures) to block sound transmission.

Transportation and Traffic

Mitigation Measure CSM-TRA-1: Implement a Traffic Control Plan during construction at the College of San Mateo

The District will require the construction contractor(s) to develop a traffic control plan, as appropriate, to minimize the effects of construction traffic on the surrounding area. (A traffic control plan may not be required for minor construction activities.) The plan will be subject to review and approval by the District. The District will be responsible for monitoring to ensure that the plan is effectively implemented by the construction contractor(s). The construction traffic control plan will include the following requirements.

- Provide clearly marked pedestrian detours if any sidewalk or pedestrian walkway closures are necessary.
- Provide clearly marked bicycle detours if heavily used bicycle routes must be closed, or if bicyclist safety might be otherwise compromised.
- Provide crossing guards and/or flag persons as needed to avoid traffic conflicts and ensure pedestrian and bicyclist safety.
- Use nonskid traffic plates over open trenches to minimize hazards.
- Locate all stationary equipment as far away as possible from areas used heavily by vehicles, bicyclists, and pedestrians.
- Notify and consult with emergency service providers and provide emergency access by whatever means necessary to expedite and facilitate the passage of emergency vehicles.
- Avoid routing construction traffic through residential areas to the extent feasible. Prohibit mobilization and demobilization of heavy construction equipment during AM and PM peak traffic hours.
- Provide access for driveways and private roads outside the immediate construction zone by using steel plates or temporary backfill, as necessary.
- Prohibit construction worker parking in residential areas.

Skyline College

Aesthetics

Mitigation Measure SC-AES-1: Limit exterior construction activities to daylight hours at Skyline College within 0.25 mile of residences

The effect of nighttime construction light and glare on nearby residences will be minimized by limiting construction hours within 0.25 mile of residences. Construction activities, which are scheduled to take place between 6:00 am and 7:00 pm on weekdays, will be limited to daylight hours (which will vary according to season). Therefore, the construction hours will be adjusted during the seasons to ensure construction activities take place during daylight hours.

Mitigation Measure SC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Skyline College

Buildings associated with the Project to be located within scenic vista views will be designed in a manner that allows these features to blend with the surrounding built and natural environments so that these structures complement the visual landscape. The following measures will be applied.

- Visible roofing materials will be selected to balance aesthetics with energy performance and compliance with codes and standards using a color shade that is visually cohesive with and darker than the general surrounding natural area. Colors may be chosen from the U.S. Department of the Interior Bureau of Land Management (BLM) Standard Environmental Colors Chart CC-001: June 2008. The building designer will employ the use of color panels as mock-ups which will be evaluated from key observation points during common lighting conditions (front versus backlighting) to aid in the appropriate color selection. Panels will be a minimum of 3 by 2 feet in dimension and will be evaluated from various distances, but within 1,000 feet, to ensure the best possible color selection. Color selection will be made for the coloring of the most prevalent season, and the intent is to match the panels to this surrounding coloring and pick a color that best fits. Choosing a shade that is darker will allow the surface to recede and blend within the visual landscape whereas a lighter color advances or is more apparent within the visual landscape.
- New building facades will be finished in earth tones to help buildings blend better within the natural setting. White and lighter beiges and tans, which would make buildings stand out and contrast against nearby darker tree canopies, will be avoided.

Mitigation Measure SC-AES-3: Ensure new residential development blends with existing residential development at Skyline College

New residential development at Skyline College will be designed in a manner that it is sensitive to and blends with adjacent residential development. As such, the new development will be designed to be consistent in height and massing to existing development. Façade treatments and landscaping will also be similar to ensure visual cohesion between new and existing development.

Mitigation Measure SC-AES-4: Apply minimum lighting standards at Skyline College

The District will implement an interior lighting policy for all new buildings that does the following:

- Building design would be required to include low-intensity interior safety lighting for use during afterhours. This practice would decrease the amount of nighttime light that would occur from using standard interior lighting as safety lighting.
- Use of interior lights to ensure building safety as required by code, but the unnecessary overuse of interior nighttime lighting would be prevented by requiring that interior spaces implement a "lights-off" policy. This practice requires that all non-safety lighting be turned off at night (such as in offices, classrooms, and hallways), after instructional hours. This may be accommodated by utilizing automatic motion sensor lighting that is programmed for use afterhours.
- Use of harsh mercury vapor or low-pressure sodium bulbs would be prohibited.

All artificial outdoor lighting will be limited to safety and security requirements, designed using Illuminating Engineering Society's design guidelines and in compliance with International Dark-Sky Association approved fixtures. All lighting is designed to have minimum impact on the surrounding environment and will use downcast, cut-off type fixtures that direct the light only towards objects requiring illumination. Shielding will be utilized, where needed, to ensure light pollution is minimized. Therefore, lights will be installed at the lowest allowable height and cast low-angle illumination while minimizing incidental light spill onto adjacent properties, open spaces, or backscatter into the nighttime sky. The lowest allowable illuminance level will be used for all lighted areas and the amount of nighttime lights needed to light an area will be minimized to the highest degree possible. Light fixtures will have non-glare finishes that will not cause reflective daytime glare. Lighting will be designed for energy efficiency and have daylight sensors or be timed with an on/off program. Lights will provide good color rendering with natural light qualities with the minimum intensity feasible for security, safety, and personnel access. Lighting, including light color rendering and fixture types, will be designed to be aesthetically pleasing.

LED lighting will avoid the use of blue-rich white light lamps and use a correlated color temperature that is no higher than 3,000 Kelvin (International Dark-Sky Association 2010a, 2010b, 2015). Wherever possible and pragmatic, the District will use fixtures and lighting control systems that conform to International Dark-Sky Associations Fixture Seal of Approval program. In addition, LED lights will use shielding to ensure nuisance glare and that light spill does not affect sensitive residential viewers.

Lights along pathways and safety lighting at building entrances and loading areas will employ shielding to minimize offsite light spill and glare and be screened and directed away from residences and adjacent uses to the highest degree possible. The amount of nighttime lights used along pathways will be minimized to the highest degree possible to ensure that spaces are not unnecessarily over-lit, while still maintaining minimum adequate lighting to provide necessary visibility for security. For example, the amount of light can be reduced by limiting the amount of ornamental light posts to higher use areas and by using hooded wall mounts or bollard lighting on travel way portions of pathways.

In particular, pool lighting will employ spill and glare control features to minimize off-site light pollution. Luminaires will be chosen for the ability to provide horizontal and vertical beam control for better control in directing what is illuminated. In addition, shielding, such as a visor, will be used to further direct light and reduce light spill and ambient light glow. Luminaires will also incorporate photometric reflector systems that are designed to reduce light pollution.

Air Quality and Energy

Mitigation Measure SC-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at Skyline College

The District will ensure the construction contractor implements the following BAAQMD-recommended basic control measures to reduce NO_X emissions from construction equipment:

- Idling times will be minimized by shutting off equipment when it is not in use or by reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage will be provided for construction workers at all access points.
- All construction equipment will be maintained and properly tuned in accordance with manufacturer's specifications. All equipment will be checked by a certified mechanic and determined to be running in proper condition prior to operation.

Mitigation Measure SC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Skyline College

The District will ensure the construction contractor implements the following BAAQMD-recommended additional control measures to reduce NO_X emissions from construction equipment.

- Minimize the idling time of diesel powered construction equipment to 2 minutes.
- The project will develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction Project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20% NO_X reduction and 45% PM exhaust reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
- Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
- Require that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NO_X and PM.
- Require all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.

Mitigation Measure SC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Skyline College

The District will ensure that all off-road diesel-powered equipment used during construction at Cañada College is equipped with EPA Tier 4 or cleaner engines, except for specialized construction equipment for which an EPA Tier 4 engine is not available. The use of Tier 4 engines will also act to reduce ROG and NO_X emissions from construction equipment.

Mitigation Measure SC-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at Skyline College

The District will enter into a development mitigation contract with BAAQMD in order to reduce criteria pollutant emissions generated during construction of the Project to quantities below the numeric BAAQMD thresholds (Table 3.2-8). The preferred source of emissions reductions for NO_X, will be through contributions to BAAQMD's Carl Moyer Program and/or other BAAQMD incentive programs.

Implementation of this mitigation would require the District adopt the following specific responsibilities.

- Enter into a mitigation contract with BAAQMD for the Carl Moyer Program and/or other BAAQMD emission reduction incentive program. The necessary reductions must be achieved (contracted and delivered) by the applicable year in question (i.e., emissions generated in year 2016 would need to be reduced offsite in 2016). Funding would need to be received prior to contracting with participants and should allow sufficient time to receive and process applications to ensure offsite reduction projects are funded and implemented prior to commencement of Project activities being reduced. In negotiating the terms of the mitigation contract, the Project applicant and BAAQMD should seek clarification and agreement on BAAQMD responsibilities, including the following.
    - Identification of appropriate offsite mitigation fees required for the Project.
    - Timing required for obtaining necessary offsite emission credits.
    - Processing of mitigation fees paid by the Project applicant.
    - Verification of emissions inventories submitted by the Project applicant.
    - Verification that offsite fees are applied to appropriate mitigation programs within the SFBAA.
- Quantify mitigation fees required to satisfy the appropriate reductions. Funding for the emission reduction projects will be provided in an amount up to the emission reduction project cost-effectiveness limit set by for the Carl Moyer Program during the year that the emissions from construction are emitted. (The current Carl Moyer cost-effectiveness limit is $18,030 /weighted ton of criteria pollutants [NOX + ROG + (20*PM)]). An administrative fee of 5% would be paid by the Project applicant to the BAAQMD to implement the program. The funding would be used to fund projects eligible for funding under the Carl Moyer Program guidelines or other BAAQMD emission reduction incentive program meeting the same cost-effectiveness threshold that are real, surplus, quantifiable, and enforceable.

- Develop a compliance program to calculate emissions and collect fees from the construction contractors for payment to BAAQMD. The program will require, as a standard or specification of their construction contracts with the Project Sponsor, that construction contractors identify construction emissions and their share of required offsite fees, if applicable. Based on the emissions estimates, the Project applicant will collect fees from the individual construction contractors (as applicable) for payment to BAAQMD. Construction contractors will have the discretion to reduce their construction emissions to the lowest possible level through additional onsite mitigation, as the greater the emissions reductions that can be achieved by onsite mitigation, the lower the required offsite fee. Acceptable options for reducing emissions may include use of late-model engines, low-emission diesel products, additional electrification or alternative fuels, engine-retrofit technology, and/or after-treatment products. All control strategies must be verified by BAAQMD.
- Conduct daily and annual equipment activity monitoring to ensure onsite emissions reductions are achieved and no additional mitigation payments are required. Excess offsite funds can be carried from previous to subsequent years in the event that additional reductions are achieved by onsite mitigation. At the end of the Project, if it is determined that excess offset funds remain (outstanding contracts and administration over the final years of the contracts will be taken into consideration), BAAQMD and the Project applicant will determine the disposition of final funds (e.g., additional emission reduction projects to offset underperforming contracts, return of funds to the Project applicant, etc.).

Mitigation Measure SC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Skyline College

The District will require all construction contractors to implement the basic construction mitigation measures recommended by BAAQMD to reduce fugitive dust emissions. Emission reduction measures will include, at a minimum, the following measures. Additional measures may be identified by BAAQMD or the contractor as appropriate.

- All exposed surfaces affected by construction (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) will be watered two times per day, or as needed during the dry season(s) (unless limited by state or local drought response requirements or if there is a rain event).
- All haul trucks transporting soil, sand, or other loose material off site will be covered.
- All visible mud or dirt track-out onto adjacent public roads will be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads will be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved will be completed as soon as possible. Building pads will be laid as soon as possible after grading unless seeding or soil binders are used.
- A publicly visible sign will be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person will respond and take corrective action

within 48 hours. BAAQMD‘s phone number will also be visible to ensure compliance with applicable regulations.

Biological Resources

Mitigation Measure SC-BIO-1: Implement special-status plant species avoidance and revegetation measures at Skyline College

Prior to construction, the District will retain a qualified botanist to survey any areas of proposed construction disturbance that contain suitable habitat for western leatherwood, fragrant fritillary, congested-headed hayfield tarplant, Choris’ popcornflower, and showy Rancheria clover. The qualified botanist will survey appropriate areas of suitable habitat for the species during each species’ blooming period (Table 3.3-2). Surveys will be conducted in accordance with CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (California Department of Fish and Game 2009).

If no special-status plants are identified during the design-period surveys, then no further action is necessary. If one or more special-status species is found within areas proposed for disturbance, then the occurrence will be avoided, if feasible. If avoidance is not possible, a revegetation and monitoring plan will be developed and executed by a qualified botanist retained by the District prior to ground disturbance that would affect the plants. The revegetation and monitoring plan will include the following components.

- Collection of seed prior to disturbance.
- Reseeding and revegetation on a site with suitable soils and exposure.
- Regular monitoring to evaluate the success of the reseeding and revegetation and remedial measures if necessary.

Details regarding specific monitoring protocols, success criteria, and the length of the monitoring program will be developed in coordination with and approved by the appropriate regulatory agencies.

Mitigation Measure SC-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at Skyline College

Prior to any construction activities scheduled during the bird nesting season (February 1 to August 31), the District will retain a qualified wildlife biologist with demonstrated nest-searching experience to conduct preconstruction surveys for nesting birds, including raptors. The preconstruction survey will occur no more than 3 days prior to the onset of ground disturbing activities (including clearing, grubbing, and staging). If active nests are found during the survey, no-disturbance species-specific buffer zones will be established by the biologist and marked with high-visibility fencing, flagging, or pin flags. No construction activities will be allowed within the buffer zones. The size of the buffer will be based on the species' sensitivity to disturbance and planned work activities in the vicinity; typical buffer sizes are 250 feet for raptors and 50 feet for other birds. The buffer will remain in effect until the nest is no longer active. If a lapse in Project-related activities of 15 days or longer occurs, another preconstruction survey will be conducted.

To the extent feasible, the District or its contractor will initiate building demolition outside of the nesting season to avoid impacts on active nests affixed to the structure before they become active during the nesting season (February 1 to August 31). If structure demolition activities cannot occur outside of the nesting season, the District or its contractor will remove inactive nests from the structure to be demolished and install nest exclusion measures (i.e., fine mesh netting, panels, or metal projectors) outside of the nesting season. All exclusionary devices will be monitored and maintained throughout the breeding season to ensure that they are successful in preventing the birds from accessing the cavities or nest sites. No more than 3 days prior to building demolition activities, a qualified biologist will conduct a preconstruction survey of all potential nesting habitat on the structure to be demolished and the surrounding areas for the presence of active nests. If active nests are found on the building or in the affected area, then demolition activities will not proceed until the biologist verifies that all nests on the building are inactive.

After all surveys and/or nest deterrence activities are completed, the biologist will complete a memorandum detailing the survey effort and results and submit the memorandum to the District within 7 days of survey completion.

Mitigation Measure SC-BIO-3: Implement fringed myotis, pallid bat, and hoary bat avoidance measures at Skyline College

Prior to the start of construction activities at sites offering suitable bat roosting habitat, the District will retain a qualified wildlife biologist with demonstrated bat field experience to conduct preconstruction surveys for fringed myotis, pallid bat, and hoary bat. Surveys will take place no more than 7 days prior to the onset of site preparation (e.g., tree removal) and construction activities with the potential to disturb bats or their habitat and will include close inspection of potential bat roosts, such as trees and any built features within the Project footprint.

If special-status bats are found in the footprint of a proposed improvement and avoidance of roosting areas is not possible, avoidance and minimization measures will be required if it is determined that bats are using the trees as roost sites and/or sensitive bat species are detected during acoustic monitoring. Appropriate measures will be determined in coordination with CDFW and may include the following measures.

- Tree removal will be avoided between April 15 and September 15 (the maternity period) to avoid impacts on pregnant females and active maternity roosts (whether colonial or solitary).
- All tree removal will be conducted between September 15 and October 30, which corresponds to a time period when bats have not yet entered torpor or would be caring for non-volant young.
- Trees will be removed in pieces, rather than felling the entire tree.
- If a maternity roost is located, whether solitary or colonial, that roost will remain undisturbed until September 15 or until a qualified biologist has determined the roost is no longer active.
- If avoidance of non-maternity roost trees is not possible, and tree removal or trimming must occur between September 15 and October 30, qualified biologists will monitor tree trimming/removal. Prior to removal/trimming, each tree will be gently shaken and several

minutes should pass before felling trees or trimming limbs to allow bats time to arouse and leave the tree. The biologists should search downed vegetation for dead and injured bats. The presence of dead or injured bats that are species of special concern will be reported to CDFW.

- Compensatory mitigation for the loss of roosting habitat will also be determined through consultation with CDFW and may include the construction and installation of suitable replacement habitat (e.g., bat houses, planting cottonwood trees) onsite.

The District will be responsible for ensuring that CDFW requirements are implemented. Multiple survey visits and survey methods may be required at a single site to determine presence or absence of roosting bats depending on season and roost type.

Mitigation Measure SC-BIO-4a: Conduct presence–absence survey for Mission blue butterfly at Skyline College

The District will retain a qualified biologist with demonstrated field experience identifying Mission blue butterflies to survey the silver lupine stands in and adjacent to (i.e., within 100 feet of) the Project footprint at the western edge of Skyline College for the presence of Mission blue butterfly. The survey will consist of a minimum of four visits during the adult flight season (late March to early July), with at least 2 weeks between visits. Prior to initiating survey visits for a given year, the biologist will visit a nearby site where Mission blue butterflies are known to occur and/or coordinate with other local biologists to confirm that adults are detectable. Survey results will be considered valid for 1 year, after which additional surveys would be needed to demonstrate absence. Surveys will not be conducted during the following weather conditions.

- Fog, drizzle, or rain.
- Sustained or gusting winds averaging over 15 miles per hour (mph) measured over a 30-second period at a height of 4 to 6 feet above ground level.
- Temperature in the shade at ground level less than 60° F with less than 50% cloud cover, or less than 70° with 50% or more cloud cover.

Weather conditions will be recorded on site using appropriate instruments and will not be estimated or obtained from Internet websites.

If the survey(s) demonstrate Mission blue butterfly absence from the Project footprint and adjacent areas, no further mitigation will be required.

Mitigation Measure SC-BIO-4b: Avoid impacts on Mission blue butterfly habitat during construction of the Environmental Sciences building at Skyline College

If Mission blue butterflies are detected using silver lupine plants within or adjacent to the Project footprint, the District will retain a qualified biologist experienced in silver lupine identification to delineate observed stands of this plant with a global positioning system (GPS) unit capable of sub-meter accuracy near the proposed Building 12, Environmental Sciences in the western portion of Skyline College prior to the final design of the structure. The District, or a contractor operating under direction of the District, will use the GPS data to design the Environmental Sciences building and its placement on the site to avoid the delineated patches of silver lupine. The design will provide

that neither construction activities (including site preparation, materials storage, and transport) nor the location of the building eliminate any areas of silver lupine.

Mitigation Measure SC-BIO-4c: Consult with the U.S. Fish and Wildlife Service if impacts on Mission blue butterfly habitat cannot be avoided at Skyline College

If Mission blue butterflies are detected during presence–absence surveys and avoidance of silver lupine is not feasible, the District will consult with the U.S. Fish and Wildlife Service (USFWS) regarding appropriate compensatory mitigation for the loss of habitat, including possible salvage and translocation of impacted plants. At a minimum, the District will replace any impacted habitat at a 2:1 ratio (i.e., square feet of silver lupine planted or translocated: square feet of silver lupine permanently impacted by construction).

If translocation of impacted plants is approved as a component of compensatory mitigation, the District or third-party contractor must prepare a USFWS-approved salvage and transplantation plan that includes the following components, at a minimum.

- Plants will be moved during the dormant season to minimize impacts on individuals.
- Some topsoil from the impact site will also be moved to the transplant site to introduce soil microorganisms.
- The plan will have a detailed description of the transplantation receptor site (including soil type, soil moisture, topography, hydrology, presence or absence of typical associated plant species, site accessibility) and provide rationale for expected planting success.

Mitigation Measure SC-BIO-5: Implement tree avoidance, minimization, and replacement plan at the residential development site at Skyline College

The definition of *heritage tree* for the purposes of this mitigation will be the same definition used in Chapter 8.25 of the City of San Bruno (City) Municipal Code. If there are heritage trees on the residential development site (Surplus Parcel B) that would be removed or pruned in conjunction with the development, then prior to ground disturbance, the District will apply for and receive a heritage tree removal permit from the City. The District will comply with the conditions of that permit.

Tree Survey—Prior to ground disturbance, the District or its representative will hire a certified arborist for the purpose of surveying Surplus Parcel B to identity any trees that would qualify as heritage trees under Chapter 8.25 of the City's municipal code. The arborist will prepare a report describing the existing trees on the site and whether any qualify as heritage trees requiring a permit from the City for their removal or pruning.

Site Plan—If there are qualifying heritage trees, then the arborist will prepare a site plan that accurately indicates the location, species, tree dripline, and trunk circumference of all qualifying trees whose tree trunks lie within 50 feet (15.2 meters) of proposed Project activities, or other proposed development activity (e.g., staging areas, stockpiling of construction materials, fill, etc.). The site plan will include any qualifying trees whose trunks lie on adjoining property but whose canopies (driplines) extends onto the Project site if any pruning of those trees is to be undertaken as part of the development of Surplus Parcel B. The site plan will indicate which individual trees are

proposed to be (1) removed, (2) pruned in conjunction with the residential Project, or (3) protected by exclusion fencing at the dripline or as prescribed by the arborist. The plan will contain a tally of the total number of trees proposed to be removed and their respective tree circumferences. If the City has previously designated one or more trees on the site or an adjoining site as a Heritage Tree(s), then those trees will be so labeled on the site plan.

Heritage Tree Removal Permit Information—In order to inform the removal permit application, the arborist's report will include the following information about the affected heritage trees.

- The condition of the tree or trees with respect to disease, danger of falling, proximity to existing or proposed structures and interference with utility services.
- The necessity to remove the tree or trees in order to construct any proposed improvements to allow reasonable economic enjoyment of the property.
- The topography of the land and the effect of the removal of the tree on erosion, soil retention, and diversion or increased flow of surface waters.
- The number of trees existing in the neighborhood on improved property and the effect the removal would have on the established standard of the area and property values.
- The number of trees the particular parcel can adequately support according to good arboricultural practices.
- Photographs of the tree(s) proposed to be affected.

No Qualifying Trees on Site—If the site contains no trees that meet Chapter 8.25 definitions, this will be indicated on the site plan.

Cultural Resources

Mitigation Measure SC-CUL-1: Stop work if cultural resources are encountered during ground-disturbing activities at Skyline College

The District will ensure the construction specifications include a stop work order if prehistoric or historic-period cultural materials are unearthed during ground-disturbing activities. All work within 100 feet of the find will be stopped until a qualified archaeologist and Native American representative can assess the significance of the find. Prehistoric materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool making debris; culturally darkened soil (midden) containing heat-affected rocks and artifacts; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered-stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. If the find is determined to be potentially significant, the archaeologist, in consultation with the Native American representative, will develop a treatment plan that could include site avoidance, capping, or data recovery.

Mitigation Measure SC-CUL-2: Stop work if human remains are encountered during ground-disturbing activities at Skyline College

The District will ensure the construction specifications include a stop work order if human remains are discovered during construction or demolition. There will be no further excavation or disturbance of the site within a 50-foot radius of the location of such discovery, or any nearby area reasonably suspected to overlie adjacent remains. The San Mateo County Coroner will be notified and will make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he will notify the Native American Heritage Commission, who will attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this state law, then the land owner will re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

Geology and Soils

Mitigation Measure SC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Skyline College and comply with recommendations

The District will have a qualified engineer prepare design-level geotechnical investigations for each Project element involving human occupation. The geotechnical investigation report will include recommendations to ensure the building is designed in accordance with the specifications of CGS Special Publication 117, *Guidelines for Evaluating and Mitigating Seismic Hazards*, and the requirements of the Seismic Hazards Mapping Act, which will minimize the structural damage and risk to humans from seismically induced ground shaking. The District and DSA will ensure that recommendations made in the geotechnical report will be implemented as part of the Project's design and construction.

Recommendations may include considerations for design of permanent below-grade walls to resist static lateral earth pressures, lateral pressures caused by seismic activity, and traffic loads; a method for back draining walls to prevent the buildup of hydrostatic pressure; considerations for design of excavation shoring system; excavation monitoring; and seismic design.

Mitigation Measure SC-GEO-2: Stockpile topsoil removed during construction at Skyline College and reuse stockpiled topsoil during revegetation

The contractor(s) retained for construction and revegetation of the Project will stockpile excavated topsoil on disturbed areas within the campus boundaries (e.g., parking lot expansion areas) so that it can be reused for revegetation on the campus as needed. To ensure maximum topsoil recovery, topsoil will be stockpiled separately from other excavated materials and covered. Revegetation and landscaping will use stockpiled topsoil.

Mitigation Measure SC-GEO-3: Implement procedures for identifying, evaluating, and recovering paleontological resources at Skyline College

Prior to the start of any subsurface excavations that would extend beyond previously disturbed soils, all construction forepersons and field supervisors will receive training by a qualified

professional paleontologist, as defined by the Society of Vertebrate Paleontology (SVP), who is experienced in teaching non-specialists, to ensure they can recognize fossil materials and will follow proper notification procedures in the event any are uncovered during construction. Procedures to be conveyed to workers include halting construction within 50 feet of any potential fossil find and notifying a qualified paleontologist, who will evaluate its significance.

If a fossil is determined to be significant and avoidance is not feasible, the paleontologist will develop and implement an excavation and salvage plan in accordance with SVP standards. Construction work in these areas will be halted or diverted to allow recovery of fossil remains in a timely manner. Fossil remains collected during the monitoring and salvage portion of the mitigation program will be cleaned, repaired, sorted, and cataloged. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, will then be deposited in a scientific institution with paleontological collections. A final Paleontological Mitigation Plan Report will be prepared that outlines the results of the mitigation program. The District will be responsible for ensuring that monitor's recommendations regarding treatment and reporting are implemented.

Greenhouse Gas Emissions

Mitigation Measure SC-GHG-1: Where feasible, implement BAAQMD's best management practices for GHG emissions at Skyline College

All construction contractors will implement the following BAAQMD-recommended best management practices (BMPs) to reduce GHG emissions, as applicable.

- Use alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment in at least 15% of the fleet.
- Use at least 10% local building materials.
- Recycle at least 50% of construction waste or demolition materials.

Hazards and Hazardous Materials

Mitigation Measure SC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Skyline College

The contractors will develop and implement a spill prevention, control, and countermeasure program (SPCCP) to minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities. The SPCCP will be completed before any construction or demolition activities begin. Implementation of this measure will comply with state and federal water quality regulations.

The District will review and approve the SPCCP before onset of construction activities. The District will routinely inspect the construction area to verify that the measures specified in the SPCCP are properly implemented and maintained. The District will notify its contractors immediately if there is a noncompliance issue and will require compliance.

The federal reportable spill quantity for petroleum products, as defined in 40 CFR 110, is any oil spill that includes any of the following.

- Violates applicable water quality standards.
- Causes a film or sheen on or discoloration of the water surface or adjoining shoreline.
- Causes a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.

If a spill is reportable, the contractors' superintendents will notify the District, and the District will take action to contact the appropriate safety and clean-up crews to ensure that the SPCCP is followed. A written description of reportable releases must be submitted to the San Francisco Bay Regional Water Quality Control Board. This submittal must contain a description of the spill, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred, and a description of the steps taken to prevent and control future releases. The releases would be documented on a spill report form.

If a reportable spill has occurred and results determine that Project activities have adversely affected surface water or groundwater quality, a detailed analysis will be performed by a registered environmental assessor to identify the likely cause of contamination. This analysis will conform to American Society for Testing and Materials (ASTM) standards, and will include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, the District and its contractors will select and implement measures to control contamination, with a performance standard that groundwater quality must be returned to baseline conditions. These measures will be subject to approval by the District.

Mitigation Measure SC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Skyline College

The construction specifications will include this measure to protect construction workers and/or the public from known or previously undiscovered soil and groundwater contamination during construction activities. Prior to excavation, a Site Safety Plan (soil and groundwater management plan) will be prepared and, at a minimum, include the following.

- A requirement that all construction activities involving work in proximity to potentially contaminated soils and/or groundwater be undertaken in accordance with California Occupational Safety and Health Administration (Cal OSHA) standards, contained in Title 8 of the CCR.
- Soil and groundwater mitigation and control specifications for construction activities, including health and safety provisions for monitoring exposure to construction workers, procedures to be undertaken in the event that previously unreported contamination is discovered, and emergency procedures and responsible personnel.
- Procedures for managing soils and groundwater removed from the site to ensure that any excavated soils and/or dewatered groundwater with contaminants are stored, managed, and disposed in accordance with applicable regulations.

Mitigation Measure SC-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at Skyline College

To protect construction workers and the public from known or undiscovered hazardous building materials, including asbestos and lead, all demolition activities will be undertaken in accordance with the California Occupational Safety and Health Administration (Cal OSHA) standards contained in Title 8 of the California Code of Regulations (CCR). During demolition activities, all building materials containing lead-based paint will be removed in accordance with Cal OSHA Lead in Construction Standard, Title 8, CCR 1532.1. All potentially friable asbestos-containing materials (ACMs) will be removed in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to building demolition or renovation that may disturb the materials. Applicable standards include the following.

- The facility will be inspected before any renovation occurs in which 160 square feet or more of building materials or 260 linear feet or more of pipe insulation will be disturbed at a regulated facility, or any demolition occurs at a regulated facility.
- An asbestos notification form will be submitted to the Bay Area Air Quality Management District for any regulated asbestos abatement Project or regulated demolition 10 working days before the activity begins.
- If ACMs are discovered during a renovation or demolition, they must be removed before the Project may proceed. Also, the Cal OSHA and California Environmental Protection Agency hazardous waste regulations apply in most cases.

Mitigation Measure SC-HAZ-4: Comply with legal requirements for fire prevention during construction activities at Skyline College

In accordance with the Public Resources Code (PRC), the construction contractor will comply with the following legal requirements during construction activities.

- Earthmoving and portable equipment with internal combustion engines will be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (PRC Section 4442).
- Appropriate fire suppression equipment will be maintained during the highest fire danger period: from April 1 to December 1 (PRC Section 4428).
- On days when a burning permit is required, flammable materials will be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor will maintain the appropriate fire suppression equipment (PRC Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines will not be used within 25 feet of any flammable materials (PRC Section 4431).

Mitigation Measure SC-HAZ-5: Create and maintain adequate firebreaks and practice fire prevention at Skyline College

The District will comply with the following measures for the duration of Project operations.

- Maintain around and adjacent to buildings and structures a firebreak made by removing and clearing away, for a distance of 100 feet as required by PRC 4290, all flammable vegetation or other combustible growth.
- Maintain around and adjacent to the project facilities additional fire protection or firebreak made by removing all brush, flammable vegetation, or combustible growth that is located within 100 feet of the structures or to the property line, whichever is nearer. Grass and other vegetation located more than 30 feet from the structures and less than 18 inches in height above the ground may be maintained where necessary to stabilize the soil and prevent erosion.
- Provide prior to project operations and maintain at all times a screen over the outlet of every chimney or stack that is attached to any device that burns any solid or liquid fuel. The screen will be constructed of nonflammable material with openings not larger than 0.5 inch.
- Prior to occupancy, install fire extinguishers.
- Employees will be trained in using extinguishers and communicating with the San Mateo Fire Department.
- The San Mateo Fire Department and/or CALFIRE will periodically inspect the project area.
- Provide the San Mateo Fire Department and/or CALFIRE access to onsite water storage tanks, if such access is needed.

Hydrology and Water Quality

Mitigation Measure SC-HYD-1: Implement erosion-control measures to protect water quality during construction at Skyline College

The District will ensure the Project's construction specifications include the storm water pollution prevention plan (SWPPP) to minimize the mobilization of sediment to storm drains and adjacent water bodies. The SWPPP will include the following erosion- and sediment-control measures, based on standard industry measures and standard dust-reduction measures.

- Cover or apply nontoxic soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more) that could contribute sediment to waterways.
- Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways.
- Contain soil and filter runoff from disturbed areas by berms, vegetated filters, silt fencing, straw wattle, plastic sheeting, catch basins, or other means necessary to prevent the escape of sediment from the disturbed area.
- Prohibit the placement of earth or organic material where it may be directly carried into a stream, marsh, slough, lagoon, or body of standing water.

- Prohibit the following types of materials from being rinsed or washed into streets, shoulder areas, or gutters: concrete, solvents and adhesives, fuels, dirt, gasoline, asphalt, and concrete saw slurry.
- Conduct dewatering activities according to the provisions of the SWPPP.
- Prohibit placement of dewatered materials in local water bodies or in storm drains leading to such bodies without implementation of proper construction water quality control measures.

Mitigation Measure SC-HYD-2: Design and maintain hydromodification features as post construction measures at Skyline College

The District will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit the volume of additional stormwater runoff by matching post-project flows to pre-project flows, and provide for onsite treatment of contaminants. These facility improvement areas will be open, level areas vegetated to allow runoff to be distributed evenly across the area. Generally, they will be designed to treat runoff by filtering raw runoff through the soil media in the treatment area to trap particulate pollutants (suspended solids and trace metals) and promote infiltration. However, alternative methods to treat runoff may be used, such as bio-filtration basins, underground detention and retention vaults or tanks, gravel beds, perforated pipes, stormwater chambers, pervious pavement, and green roofs that contain filtration media. Project areas will be designed to treat runoff so that pollutants (e.g., sediment, landscape fertilizers and/or pesticides, oil from parking areas) can be filtered out and, therefore, the Project will not contribute a substantial number of additional pollutants to runoff.

Maintenance of these features will be performed routinely to prevent sediment buildup and clogging in order to ensure optimal pollutant removal efficiency. Maintenance activities will include those listed below and would be done periodically.

- Remove obstructions, debris and trash and dispose of properly.
- Inspect to ensure proper drainage between storms and within 5 days following measurable rainfall.
- Inspect inlets for channels, soil exposure, or other evidence of erosion.
- Remove obstructions and sediment.
- Maintain vegetation via pruning and weeding, and treat with preventative and low-toxic methods.
- Check that mulch is maintained at an appropriate depth and replenish as necessary.
- Use soil that meets specifications included in the SMCWPPP C.3 Stormwater Technical Guidance Manual, or comparable document. Specifically, soils must percolate at a rate of 5 to 10 inches per hour.

A facility improvement area inspection and maintenance checklist will be used to conduct inspections, identify needed maintenance, and record maintenance that is conducted. Operation of the hydromodification features is expected to improve the quality of stormwater from the Project site. Maintenance of these areas would help eliminate or minimize impacts on stormwater quality.

Land Use and Planning

Mitigation Measure SC-LUP-1: Rezone Surplus Parcel B and amend the general plan land use designation to permit R-3 dwellings at Skyline College

The District will submit an application to the City of San Bruno to rezone Surplus Parcel B to R-1 and R-3 and amend the General Plan to permit multi-family dwellings on a portion of Surplus Parcel B. If the City declines to approve the increase in density, then the District will proceed with planning-compliant residential development, upon receipt of necessary subdivision approvals from the City, consistent with the general plan. Therefore, the residential complex at Skyline College would be consistent with San Bruno's general plan.

Noise

Mitigation Measure SC-NOI-1: Employ noise-reducing construction practices at Skyline College

If construction work must be conducted between the hours of 6:00 p.m. and 7:00 a.m. weekdays, 5:00 p.m. and 9:00 a.m. on Saturdays, or at any time on Sundays, Thanksgiving and Christmas, the District will require the contractor to employ noise-reducing construction practices limit noise to be in compliance with the county noise standards specified in Table 3.10-1. Measures that can be used to limit noise include those listed below.

- Locating equipment as far as feasible from noise sensitive uses.
- Requiring that all construction equipment powered by gasoline or diesel engines have sound-control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation.
- Not allowing idling inactive construction equipment for prolonged periods (i.e., more than 2 minutes).
- Prohibiting gasoline or diesel engines from having unmuffled exhaust.
- Scheduling construction activities and material hauling that may affect traffic flow to off-peak hours and using routes that would affect the fewest number of people.
- Using noise-reducing enclosures around noise-generating equipment.
- Constructing temporary barriers between noise sources and noise-sensitive land uses or taking advantage of existing barrier features (terrain, structures) to block sound transmission.

Mitigation Measure SC-NOI-2: Prepare a detailed noise reduction analysis at the potential housing development at Skyline College

Prior to issuance of building permits, the District will prepare a detailed analysis of the noise reduction requirements that are needed to reduce outdoor noise to an interior level of 45 dBA in any habitable room. The results of this analysis will be summarized in a report and submitted to the City of San Bruno for review and approval. Upon approval, the District will take the actions necessary to

ensure that the recommendations of the report are incorporated into the design and construction specifications of the residential development on Surplus Parcel B.

Public Services and Utilities

Mitigation Measure SC-PSU-1: Pay the fire and police services development impact fee to the City of San Bruno for Skyline College

Prior to the issuance of building permits, the District—or if the District sells all or a portion of Surplus Parcel B to a developer or developers—the developer will pay the Project's fair share of the fire and police services development impact fee to the City of San Bruno for the development of the residential complex at Skyline College.

Mitigation Measure SC-PSU-2: Pay the San Bruno Park Elementary School District and San Mateo Union High School District school impact fees for Skyline College

The District—or if the District sells all or a portion of Surplus Parcel B to a developer or developers—the developers will pay the Project's fair share of the school impact fees to the San Bruno Park Elementary School District and San Mateo Union High School District for the development of the residential complex at Skyline College.

Mitigation Measure SC-PSU-3: Assess the capacity of the City's water and wastewater system infrastructure and pay the capacity fees for Skyline College

Prior to the issuance of building permits, the District—or, if the residential component is controlled by a developer, the developer—will assess whether the existing water and wastewater facilities/infrastructure would need to be upgraded based on proposed water demands for residential complex and fire flow requirements. If the results of the analyses indicates that the pressure and flow are inadequate, then the District—or, if the residential component is controlled by a developer, the developer—will be required to upgrade the water and wastewater facilities to meet the new demands. An engineering report will be submitted to the City of San Bruno for review and approval prior to the issuance of building permits.

The District—or, if the residential component is controlled by a developer, the developer—will pay the Project's fair share of the water and wastewater capacity charges based on meter size to the City of San Bruno for the development of the residential complex at Skyline College.

Recreation

Mitigation Measure SC-REC-1: Dedicate parkland and/or pay in-lieu fees to City of San Bruno for residential development at Skyline College

The District will dedicate 0.9 acres of parkland or pay the equivalent in-lieu fee to the City of San Bruno in compliance with the City's parkland requirement. If the District sells all or a portion of Surplus Parcel B to a developer or developers, the developer, shall dedicate or pay their fair share of the in-lieu fee.

Transportation and Traffic

Mitigation Measure SC-TRA-1: Implement a Traffic Control Plan during construction at Skyline College

The District will require the construction contractor(s) to develop a traffic control plan, as appropriate, to minimize the effects of construction traffic on the surrounding area. (A traffic control plan may not be required for minor construction activities.) The plan will be subject to review and approval by the District. The District will be responsible for monitoring to ensure that the plan is effectively implemented by the construction contractor(s). The construction traffic control plan will include the following requirements.

- Provide clearly marked pedestrian detours if any sidewalk or pedestrian walkway closures are necessary.
- Provide clearly marked bicycle detours if heavily used bicycle routes must be closed, or if bicyclist safety might be otherwise compromised.
- Provide crossing guards and/or flag persons as needed to avoid traffic conflicts and ensure pedestrian and bicyclist safety.
- Use nonskid traffic plates over open trenches to minimize hazards.
- Locate all stationary equipment as far away as possible from areas used heavily by vehicles, bicyclists, and pedestrians.
- Notify and consult with emergency service providers and provide emergency access by whatever means necessary to expedite and facilitate the passage of emergency vehicles.
- Avoid routing construction traffic through residential areas to the extent feasible. Prohibit mobilization and demobilization of heavy construction equipment during AM and PM peak traffic hours.
- Provide access for driveways and private roads outside the immediate construction zone by using steel plates or temporary backfill, as necessary.
- Prohibit construction worker parking in residential areas.

San Mateo County Community College District
2015 Facilities Master Plan Amendment
Final Environmental Impact Report
Findings of Fact for Cañada College

I. INTRODUCTION

A. CEQA Process

The San Mateo County Community College District (District) analyzed the Campus Master Plan amendment (Project), including proposed facilities improvements at Cañada College, on the basis of the California Environmental Quality Act (CEQA, Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (14 CCR 15000, et seq.) and prepared an environmental impact report (EIR) disclosing the significant environmental impacts of the Project. The Final EIR prepared by the District determined that the Project's facility improvements at Cañada College could have potentially significant effects on the environment, all of which can be avoided or reduced below the level of significance by mitigation measures.

Consistent with CEQA's requirements, the Draft EIR was circulated for a public comment period beginning on August 28, 2015 and ending on October 12, 2015. All written comments received during the public comment period were responded to in Chapter 2 of the Final EIR.

Prior to approving the Project, the District's Board of Trustees (Board) will certify that it has considered the Final EIR, that the Final EIR adequately meets the requirements of CEQA, and that the Final EIR reflects the independent judgment of the Board. Upon approving the Project, the Board will adopt the following findings of fact regarding the significant effects and the alternatives identified in the Final EIR.

Pursuant to Public Resources Code (PRC) Section 21081.6, the Board is also adopting a mitigation monitoring and reporting program (MMRP) for the mitigation measures that are the Board's responsibility to implement. The MMRP establishes a program to ensure that the adopted mitigation measures identified in the Final EIR will be implemented.

B. Environmental Impact Report (EIR)

The EIR for the Campus Master Plan amendment identifies significant effects on the environment that may occur as a result of the Project's facilities improvements at Cañada College. In accordance with CEQA Guidelines Section 15091, the Board is adopting the following findings. In addition, it is adopting a Mitigation Monitoring and Reporting Program (MMRP) to report on and/or monitor the mitigation measures incorporated to avoid or substantially lessen significant environmental effects to ensure they will be implemented.

C. Record of Proceedings

For the purposes of CEQA, and the findings herein set forth, the administrative record for the Project consists of those items listed in Public Resources Code section 21167.6, subdivision (e). The record of proceedings for the District's decision on the Project can be reviewed at the District's office. Pursuant to Guidelines section 15091(e), the administrative record of these proceedings is located, and may be obtained there.

San Mateo County Community College District
3401 CSM Drive
San Mateo, CA 94402
Contact: Barbara Christensen

D. Overview of the Project

The Campus Master Plan amendment identifies planned improvements at each of the District's three campuses—Cañada College, College of San Mateo (CSM), and Skyline College—to continue the modernization and renovation work that began with adoption of the District's 2001 and 2006 facilities master plans. The improvements at each of the campuses include building modernization and renovation; building demolition and new building construction; landscape, hardscape and pedestrian walkway improvements; parking expansion/reconfiguration and roadway modifications; and renewable energy and water conserving installations.

The District has identified the following objective for the Project:

- To better serve approximately the same number of current students and staff at each campus and to prepare students for universities and high-demand jobs, the District plans to provide modern facilities and technology for the foreseeable future; improve access for disabled students; ensure classrooms meet earthquake, fire and safety requirements; replace aging infrastructure with energy efficient systems; improve pedestrian flow between buildings, make landscape and hardscape improvements, and better align parking lots and roadways.

The following findings pertain to the facility improvements planned for Cañada College, located in the City of Redwood City and Town of Woodside. The improvements are listed in Table 1.

Table 1. Proposed Facilities Improvements at Cañada College

Proposed Improvement	Facility	Approximate Size
Building Demolition	• Building 1, Gymnasium	39,000 sf
New Building Construction	• Building 1, Kinesiology/Wellness	85,000 sf
	• Building 23, Math/Science/Engineering	55,000 sf
Modernization and Renovation	• Building 3, Performing Arts Center • Building 9, Library/Student Resource Center • Building 13, Multi-Disciplinary Instructional Center • Building 16, Instructional Building • Building 18, Instructional Building	--[a]
Pedestrian Improvements	• North Quad development, between existing Buildings 17 and 22	50,000 sf [b]
Parking Lot Expansion	• Lot 6	325 parking spaces
	• Lot 10	150–200 parking spaces
Potential Renewable Energy Installations	• Building 1, Kinesiology/Wellness	30 kwh/sf/yr (maximum)
	• Building 23, Math/Science/Engineering	30 kwf/sf/yr (maximum)

Notes:

[a] Modernization and renovation could include interior and exterior improvements, but the overall building structures and size would not change.

[b] The size of the pedestrian improvements is unknown at this time but is estimated to be within the currently paved or disturbed area of 50,000 sf based on the area shown in **Figure ES-1**.

sf = square feet

kwh/sf/yr = kilowatt-hours per square foot per year

II. FINDINGS REQUIRED UNDER CEQA

A. Explanation of Findings

Prior to approval of a project, the Final EIR must be certified pursuant to Section 15090 of the CEQA Guidelines. When a certified Final EIR identifies one or more significant environmental impacts, the approving agency must make one or more of the following findings, accompanied by a brief explanation of the rationale for each identified significant impact (Section 15091 of the CEQA Guidelines):

a. Changes or alterations have been required in, or incorporated into, such project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

b. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency, or can and should be adopted by such other agency.

c. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the environmental impact report.

By way of explanation: finding a. is used when a mitigation measure is being adopted to address the Project's significant impacts; finding b. is used when another agency has responsibility for adopting the mitigation measure; and finding c. is used when either a mitigation measure or an alternative identified in the Final EIR is infeasible. No findings are required for impacts that are less than significant and require no mitigation. Section 15092 of the CEQA Guidelines states that after consideration of a Final EIR, and in conjunction with making the Section 15091 findings identified above, the lead agency may approve the project.

These findings constitute the District's best efforts to set forth the evidentiary and policy bases for its decision to approve the Project in a manner consistent with the requirements of CEQA. To the extent that these findings conclude that various proposed mitigation measures outlined in the Final EIR are feasible and have not been modified, superseded or withdrawn, the District hereby binds itself to implement these measures. These findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect when the District adopts a resolution approving the Project.

The full descriptions of the following impacts and mitigation measures are contained in the Final EIR for the Project. The descriptions are incorporated herein by reference.

B. Adopted Findings on Environmental Impacts

Aesthetics

Impact CC-AES-1: Result in temporary visual impacts caused by construction activities.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measures which reduce the impact to a less-than-significant level.

CC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Cañada College. This measure ensures that the project will not raise dust and thereby create a visual impact.

CC-AES-1: Limit exterior construction activities to daylight hours at Cañada College within 0.25 mile of residences. Limiting construction that is within the viewline of nearby residences to daylight hours avoids the use of lights that at night might otherwise be visually intrusive.

Impact CC-AES-2: Substantially degrade the existing visual character or quality of the site and its surroundings, including views from scenic vistas.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

CC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Cañada College. This measure establishes specific design requirements for roofing materials and exterior treatments that will reduce the visibility of the new buildings.

Impact CC-AES-3: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

CC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Cañada College. This measure establishes specific design requirements for roofing materials and exterior treatments that will reduce the visibility of the new buildings.

Impact CC-AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following three mitigation measures which reduce the impact to a less-than-significant level.

CC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Cañada College. This measure establishes specific design requirements for roofing materials and exterior treatments that will reduce the visibility of the new buildings.

CC-AES-3: Apply minimum lighting standards at Cañada College. This measure establishes specific requirements to minimize lighting at night when buildings are empty and to minimize the effects of outdoor lighting by specifying types of lighting and shielding requirements.

CC-AES-4: Remediate the potential for hazard glare at new Kinesiology/Wellness building at Cañada College. This will require that windows in the new Kinesiology/Wellness building be selected for their ability to minimize glare and specular highlighting. This measure will ensure that glare from the windows will not adversely affect northbound drivers on I-280 during mornings.

Air Quality and Energy

Impact CC-AQE-2: Violate a BAAQMD air quality standard or substantially contribute to an existing or projected air quality violation during Project construction.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following five mitigation measures which reduce the impact to a less-than-significant level.

CC-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NOX emissions at Cañada College. This will ensure that the construction contractor implements the basic control measures to reduce NO_X emissions from construction equipment that are recommended by the Bay Area Air Quality Management District (BAAQMD). Together, measures CC-AQE-1 through CC-AQE-4 will maintain potential NO_X emissions below the threshold level.

CC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Cañada College. This requires the construction contractor implement the additional NO_X emissions control measures promulgated by BAAQMD. Together, measures CC-AQE-1 through CC-AQE-4 will maintain potential NO_X emissions below the threshold level.

CC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM (Diesel Particulate Matter) emissions at Cañada College. This requires the use of Tier 4 engines for construction equipment. It will reduce DPM, Reactive Organic Gases (ROG), and NO_X emissions that would otherwise come from construction equipment. Together, measures CC-AQE-1 through CC-AQE-4 will maintain potential NO_X emissions below the threshold level.

CC-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at Cañada College. This measure commits the District to entering into a development mitigation contract with BAAQMD in order to reduce criteria pollutant emissions generated during construction of the Project to quantities below the numeric BAAQMD thresholds. The measure identifies specific contents of the contract to ensure that the offsets will be real. Together, measures CC-AQE-1 through CC-AQE-4 will maintain potential NO_X emissions below the threshold level.

CC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Cañada College. This measure specifies the measures that the District will undertake to meet the BAAQMD's reduction standards. These will ensure that the project does not exceed BAAQMD thresholds for particulate matter emissions.

Impact CC-AQE-4: Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The BAAQMD thresholds for criteria pollutants are thresholds for both individual impacts and for the level at which an individual impact would be cumulatively

considerable. The Board has adopted the following five mitigation measures which reduce the impact to a less-than-significant level. The measures reduce this impact in the manner discussed in Impact CC-AQE-2 above so that the project will not make a cumulatively considerable contribution to the air basin's non-attainment.

CC-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NOX emissions at Cañada College. This will ensure that the construction contractor implements the basic control measures to reduce NO_X emissions from construction equipment that are recommended by the Bay Area Air Quality Management District (BAAQMD). Together, measures CC-AQE-1 through CC-AQE-4 will maintain potential NO_X emissions below the threshold level.

CC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Cañada College. This requires the construction contractor implement the additional NO_X emissions control measures promulgated by BAAQMD. Together, measures CC-AQE-1 through CC-AQE-4 will maintain potential NO_X emissions below the threshold level.

CC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM (Diesel Particulate Matter) emissions at Cañada College. This requires the use of Tier 4 engines for construction equipment. It will reduce DPM, Reactive Organic Gases (ROG), and NO_X emissions that would otherwise come from construction equipment. Together, measures CC-AQE-1 through CC-AQE-4 will maintain potential NO_X emissions below the threshold level.

CC-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at Cañada College. This measure commits the District to entering into a development mitigation contract with BAAQMD in order to reduce criteria pollutant emissions generated during construction of the Project to quantities below the numeric BAAQMD thresholds. The measure identifies specific contents of the contract to ensure that the offsets will be real. Together, measures CC-AQE-1 through CC-AQE-4 will maintain potential NO_X emissions below the threshold level.

CC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Cañada College. This measure specifies the measures that the District will undertake to meet the BAAQMD's reduction standards. These will ensure that the project does not exceed BAAQMD thresholds for particulate matter emissions.

Impact CC-AQE-5: Expose existing sensitive receptors to substantial pollutant concentrations during construction.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following three mitigation measures which reduce the impact to a less than significant level.

CC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Cañada College. This requires the construction contractor implement the additional NO_X emissions control measures promulgated by BAAQMD.

CC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Cañada College. This requires the use of Tier 4 engines for construction equipment. It will reduce DPM, Reactive Organic Gases (ROG), and NO_X emissions that would otherwise come from construction equipment.

CC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Cañada College. This measure specifies the measures that the District will undertake to meet the BAAQMD's reduction standards. These will ensure that the project does not exceed BAAQMD thresholds for particulate matter emissions.

Biological Resources

Impact CC-BIO-1: Impact special-status plant species.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-BIO-1: Implement special-status plant species avoidance and revegetation measures at Cañada College. This will require the District to retain a qualified botanist to undertake a blooming season survey of any areas of proposed construction disturbance that contain suitable habitat for western leatherwood, fragrant fritillary, congested-headed hayfield tarplant, Choris' popcornflower, and showy Rancheria clover. The surveys will be conducted in accordance with CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities.* If any such plants are encountered, the District would prepare a revegetation and monitoring plan as specified in this measure. The plan includes performance measures to ensure successful revegetation.

Impact CC-BIO-2: Impact special-status bird species.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at Cañada College. This will require that prior to any construction activities scheduled during the bird nesting season (February 1 to August 31), the District retain a qualified wildlife biologist to conduct preconstruction surveys for nesting birds, including raptors. The measure establishes requirements for avoidance including the removal of nonactive nests outside of the nesting season and, if active nests are found on the building or in the affected area, a halt to demolition until the biologist verifies that all nests on the building are inactive.

Impact CC-BIO-3: Impact special-status bats.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-BIO-3: Implement fringed myotis, pallid bat, and hoary bat avoidance measures at Cañada College. This will require that prior to any construction activities at sites offering suitable bat roosting habitat, the District retain a qualified wildlife biologist to conduct preconstruction surveys for fringed myotis, pallid bat, and hoary bat. The measure prescribes specific avoidance and minimization measures that will be refined in coordination with the California Department of Fish and Wildlife to ensure their effectiveness.

Impact CC-BIO-5: Impact native wildlife nursery sites.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at Cañada College. This measure will require that prior to any construction activities scheduled during the bird nesting season (February 1 to August 31), the District retain a qualified wildlife biologist to conduct preconstruction surveys for nesting birds, including raptors. The measure establishes requirements for avoidance including the removal of nonactive nests outside of the nesting season and, if active nests are found on the building or in the affected area, a halt to demolition until the biologist verifies that all nests on the building are inactive.

Cultural Resources

Impact CC-CUL-2: Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

CC-CUL-1: Stop work if cultural resources are encountered during ground-disturbing activities at Cañada College. This will ensure the construction specifications include a stop work order if prehistoric or historic-period cultural materials are unearthed during ground-disturbing activities, until a qualified archaeologist and Native American representative can assess the significance of the find. Where the find is significant, the archaeologist, in consultation with the Native American representative, will develop a treatment plan that could include site avoidance, capping, or data recovery.

Impact CC-CUL-3: Disturb any human remains, including those interred outside of formal cemeteries.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-CUL-2: Stop work if human remains are encountered during ground-disturbing activities at Cañada College. This measure will ensure the construction specifications include a stop work order if human remains are discovered during construction or demolition. It will require that any remains be treated in accordance with Section 7050.5(b) of the California Health and Safety Code. That code includes specific requirements for the proper treatment of Native American remains.

Geology, Soils, and Paleontology

Impact CC-GEO-2: Expose people or structures to strong seismically induced groundshaking.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Cañada College and comply with recommendations. This will require the District to have a qualified engineer prepare design-level geotechnical investigations for each Project element involving human occupation. The geotechnical investigation report will include recommendations to ensure the building is designed in accordance with the specifications of CGS Special Publication 117, *Guidelines for Evaluating and Mitigating Seismic Hazards*, and the requirements of the Seismic Hazards Mapping Act, which will minimize the structural damage and risk to humans from seismically induced groundshaking.

Impact CC-GEO-5: Result in loss of topsoil from Project construction and operation.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-GEO-2: Stockpile topsoil removed during construction at Cañada College and reuse stockpiled topsoil during revegetation. Under this measure, the contractor(s) retained for construction and revegetation of the Project will stockpile excavated topsoil on disturbed areas within the campus boundaries (e.g., parking lot expansion areas) so that it can be reused for revegetation on the campus as needed. To ensure maximum topsoil recovery, topsoil will be stockpiled separately from other excavated materials and covered. Revegetation and landscaping will use stockpiled topsoil.

Impact CC-GEO-6: Increase risk of landslide, liquefaction, lateral spread, subsidence, or collapse, as a result of Project location on an unstable geologic unit or soil.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Cañada College and comply with recommendations. This will require the District to have a qualified engineer prepare design-level geotechnical investigations for each Project element involving human occupation. The geotechnical investigation report will include recommendations to ensure the building is designed in accordance with the specifications of CGS Special Publication 117, *Guidelines for Evaluating and Mitigating Seismic Hazards*, and the requirements of the Seismic Hazards Mapping Act, which will minimize the structural damage and risk to humans from seismically induced groundshaking.

Impact CC-GEO-7: Increase risk of damage to Project structures as a result of Project location on expansive soils.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Cañada College and comply with recommendations. This will require the District to have a qualified engineer prepare design-level geotechnical investigations for each Project element involving human occupation. The geotechnical investigation report will include recommendations to ensure the building is designed in accordance with the specifications of CGS Special Publication 117, *Guidelines for Evaluating and Mitigating Seismic Hazards*, and the requirements of the Seismic Hazards Mapping Act, which will minimize the structural damage and risk to humans from seismically induced groundshaking.

Greenhouse Gases

Impact CC-GHG-1: Generate GHG emissions during Project construction.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following two mitigation measures which reduce the impact to a less than significant level.

CC-GHG-1: Where feasible, implement BAAQMD's best management practices for GHG emissions at Cañada College. This will require all construction contractors to implement the BAAQMD-recommended best management practices to reduce GHG emissions. These include using alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment in at least 15% of the fleet, using at least 10% local building materials, and recycling at least 50% of construction waste or demolition materials.

CC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Cañada College. This measure specifies

the measures that the District will undertake to meet the BAAQMD's reduction standards. These will ensure that the project does not exceed BAAQMD thresholds for particulate matter emissions.

Hazards and Hazardous Materials

Impact CC-HAZ-1: Cause a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during Project construction or from Project operation.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Cañada College. Under this measure, the contractors will develop (subject to District review and approval) and implement a spill prevention, control, and countermeasure program (SPCCP) to minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities. The SPCCP will be completed before any construction or demolition activities begin. The measure includes performance standards for the treatment of any reportable spill to ensure that impacts will be kept below a level of significance.

Impact CC-HAZ-2: Cause 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 during Project construction.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measures which reduce the impact to a less than significant level.

CC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at

Cañada College. This measure requires the construction specifications to include specific performance standards to protect construction workers and/or the public from known or previously undiscovered soil and groundwater contamination during construction activities. Prior to excavation, a Site Safety Plan (soil and groundwater management plan) will be prepared, as specified in the measure.

CC-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at Cañada College. This measure provides that to protect construction workers and the public from known or undiscovered hazardous building materials, including asbestos and lead, all demolition activities will be undertaken in accordance with the California Occupational Safety and Health Administration standards contained in Title 8 of the California Code of Regulations.

Impact CC-HAZ-4: Emit or involve handling of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measures which reduce the impact to a less than significant level.

CC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Cañada College. Under this measure, the contractors will develop (subject to District review and approval) and implement a spill prevention, control, and countermeasure program to minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities. The SPCCP will be completed before any construction or demolition activities begin. The measure includes performance standards for the treatment of any reportable spill to ensure that impacts will be kept below a level of significance.

CC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Cañada College. This measure requires the construction specifications to include specific performance standards to protect construction workers and/or the public from known or previously undiscovered soil and groundwater contamination during construction activities. Prior to excavation, a Site Safety Plan (soil and groundwater management plan) will be prepared, as specified in the measure.

CC-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at Cañada College. This measure provides that to protect construction workers and the public from known or

undiscovered hazardous building materials, including asbestos and lead, all demolition activities will be undertaken in accordance with the California Occupational Safety and Health Administration standards contained in Title 8 of the California Code of Regulations.

Impact CC-HAZ-6: Interfere with adopted emergency response plan or emergency evacuation plan.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-TRA-1: Implement a Traffic Control Plan during construction at Cañada College. This will require the construction contractor(s) to develop a traffic control plan, consistent with the performance measures set out in the mitigation measure, to minimize the effects of construction traffic on the surrounding area. The plan will be subject to review and approval by the District.

Impact CC-HAZ-7: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-HAZ-4: Comply with legal requirements for fire prevention during construction activities at Cañada College. This measure requires compliance with Public Resources Code Sections 4427 (distance from construction equipment), 4428 (fire suppression equipment on site), 4431 (distance from gasoline-powered power tools), and 4442 (spark arrestors on internal combustion engine equipment) which will ensure that fire hazard is minimized.

Hydrology and Water Quality

Impact CC-HYD-1: Violate any water quality standards or waste discharge requirements and/or otherwise substantially degrade water quality.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measures which reduce the impact to a less than significant level.

CC-HYD-1: Implement erosion-control measures to protect water quality during construction at Cañada College. The District will ensure the Project's construction specifications include the storm water pollution prevention plan to minimize the mobilization of sediment to storm drains and adjacent water bodies. This measure identifies the requirements of that plan.

CC-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at Cañada College. This measure will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit stormwater runoff and provide for onsite treatment of contaminants. It includes specific performance standards to ensure its effectiveness.

CC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Cañada College. Under this measure, the contractors will develop (subject to District review and approval) and implement a spill prevention, control, and countermeasure program to minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities. The SPCCP will be completed before any construction or demolition activities begin. The measure includes performance standards for the treatment of any reportable spill to ensure that impacts will be kept below a level of significance.

CC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Cañada College. This measure requires the construction specifications to include specific performance standards to protect construction workers and/or the public from known or previously undiscovered soil and groundwater contamination during construction activities. Prior to excavation, a Site Safety Plan (soil and groundwater management plan) will be prepared, as specified in the measure.

Impact CC-HYD-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at Cañada College. This measure will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit stormwater runoff and provide for onsite treatment of contaminants. It includes specific performance standards to ensure its effectiveness.

Impact CC-HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-HYD-1: Implement erosion-control measures to protect water quality during construction at Cañada College. The District will ensure the Project's construction specifications include the storm water pollution prevention plan to minimize the mobilization of sediment to storm drains and adjacent water bodies. This measure identifies the requirements of that plan.

CC-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at Cañada College. This measure will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and

located to limit stormwater runoff and provide for onsite treatment of contaminants. It includes specific performance standards to ensure its effectiveness.

Impact CC-HYD-4: Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at Cañada College. This measure will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit stormwater runoff and provide for onsite treatment of contaminants. It includes specific performance standards to ensure its effectiveness.

Impact CC-HYD-5: Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place within a 100-year flood hazard area structures that would impede or redirect flood flows.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at Cañada College. This measure will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit stormwater runoff and provide for onsite treatment of contaminants. It includes specific performance standards to ensure its effectiveness.

Noise

Impact CC-NOI-1: Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-NOI-1: Employ noise-reducing construction practices at Cañada College. This will require the contractor to employ noise-reducing construction practices to limit noise to be in compliance with the county noise standards between the hours of 6:00 p.m. and 7:00 a.m. weekdays, 5:00 p.m. and 9:00 a.m. on Saturdays, or at any time on Sundays, Thanksgiving and Christmas. The measure includes specific performance standards to ensure it will be effective.

Impact CC-NOI-4: Result in a temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-NOI-1: Employ noise-reducing construction practices at Cañada College. This will require the contractor to employ noise-reducing construction practices to limit noise to be in compliance with the county noise standards between the hours of 6:00 p.m. and 7:00 a.m. weekdays, 5:00 p.m. and 9:00 a.m. on Saturdays, or at any time on Sundays, Thanksgiving and Christmas. The measure includes specific performance standards to ensure it will be effective.

Transportation and Traffic

Impact CC-TRA-4: Result in potential construction impacts on traffic operation and circulation, transit service, non-motorized transportation facilities, and emergency access.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less than significant level.

CC-TRA-1: Implement a Traffic Control Plan during construction at Cañada College. This will require the construction contractor(s) to develop a traffic control plan, consistent with the performance measures set out in the mitigation measure, to minimize the effects of construction traffic on the surrounding area. The plan will be subject to review and approval by the District.

III. FINDINGS REGARDING THE PROJECT ALTERNATIVES

As required by CEQA, a discussion of possible alternatives to the Campus Master Plan amendment. In addition to the No-Project Alternative, the EIR examined one alternative for each campus—Cañada College, CSM, and Skyline College. With adoption of the Project, the Board makes the following findings to support its rejection of the No-Project and Cañada College campus alternatives.

Public Resources Code section 21002 provides that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]" The CEQA Guidelines defines "feasible" to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors." (CEQA Guidelines Section 15364) The concept of "feasibility" also encompasses the question of whether a particular alternative promotes the underlying objectives of a project. (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417.) "'[F]easibility' under CEQA also encompasses 'desirability' to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors." (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417; *Sequoyah Hills Homeowners Assn. v. City of Oakland* (1993) 23 Cal.App.4th 704, 715.)

No Project Alternative: Under this alternative, the proposed facilities improvements would not be made and the Cañada College campus would continue to function as it does currently. Over time, activities on the campus would likely have a somewhat smaller impact on energy use, stormwater quality, and water demand than under existing conditions due to continued implementation of the campus sustainability plan.

***Finding*:**

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the project alternatives identified in the environmental impact report.

Supporting Evidence:

By retaining the status quo, the No Project Alternative would not meet the objectives to provide modern facilities and technology for the foreseeable future; improve access for disabled students; ensure classrooms meet earthquake, fire and safety requirements; replace aging infrastructure with energy efficient systems; improve pedestrian flow between buildings, make landscape and hardscape improvements, and better align parking lots and roadways.

The No Project alternative is inconsistent with District sustainability policies intended to reduce the overall impact of campus operation. Specifically, this alternative would limit the District's ability to meet the objectives of the *Cañada College Sustainability Plan* to substantially reduce energy use and increase water conservation and efficiency. The objectives cannot be met without modernization of the campus and the replacement of older buildings with more energy- and water-efficient ones.

Cañada College Alternative: This alternative would include the proposed facilities improvements identified in the Project, but with a reduced-size Kinesiology/Wellness Building. The purpose of the reduced size would be to minimize aesthetic changes, and thereby visual impacts, between the new and existing structures. It would also reduce traffic impacts related to the proposed facility, by accommodating fewer users.

***Finding*:**

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the project alternatives identified in the environmental impact report.

Supporting Evidence:

The Reduced Size Kinesiology/Wellness Building Alternative would be inconsistent with the District policy related to maximizing the use of facility resources, creating a revenue stream that will supplement the College budgetary needs, including equipment maintenance and replacement, and providing for broader access to the College by the surrounding community. This policy is reflected in the prior construction and operation of the San Mateo Athletic Club at the College of San Mateo campus. That facility, which opened to pubic and student membership in 2010, has been profitable since 2011. (San Mateo County Community College District 2015)

The Reduced Size Kinesiology/Wellness Building would support a substantially smaller membership (approximately 2,750 members) than the San Mateo Athletic Club (approximately 3,700 members). At that smaller size, the potential to be a revenue

generator for the campus becomes questionable. The District chooses not to select an alternative that would be uncertain to be at least self-supporting and potentially profitable.

REFERENCES:

San Mateo County Community College District. 2015. San Mateo Athletic Club webpage. Available: http://smccd.edu/auxiliaryservices/athleticclub.php. Accessed: October 23, 2015

San Mateo County Community College District
2015 Facilities Master Plan Amendment
Final Environmental Impact Report
Findings of Fact for the College of San Mateo

I. INTRODUCTION

A. CEQA Process

The San Mateo County Community College District (District) analyzed the Campus Master Plan amendment (Project), including proposed facilities improvements at the College of San Mateo, on the basis of the California Environmental Quality Act (CEQA, Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (14 CCR 15000, et seq.) and prepared an environmental impact report (EIR) disclosing the significant environmental impacts of the Project. The Final EIR prepared by the District determined that the Project's facilities improvements at the College of San Mateo could have potentially significant effects on the environment. With the exception of the air quality impact described below, all of the impacts can be avoided or reduced below the level of significance by mitigation measures.

Consistent with CEQA's requirements, the Draft EIR was circulated for a public comment period beginning on August 28, 2015 and ending on October 12, 2015. All written comments received during the public comment period were responded to in Chapter 2 of the Final EIR.

Prior to approving the Project, the District's Board of Trustees (Board) will certify that it has considered the Final EIR, that the Final EIR adequately meets the requirements of CEQA, and the Final EIR reflects the independent judgment of the Board. Upon approving the Project, the Board will adopt the following findings of fact regarding the significant effects and the alternatives identified in the Final EIR. The Final EIR concluded that there would be a significant and unavoidable environmental impact on air quality during construction at the College of San Mateo. Accordingly, the Board will adopt a Statement of Overriding Considerations describing the project benefits that outweigh this impact.

Pursuant to Public Resources Code (PRC) Section 21081.6, the Board is also adopting a mitigation monitoring and reporting program (MMRP) for the mitigation measures that are the Board's responsibility to implement. The MMRP establishes a program to ensure that the adopted mitigation measures identified in the Final EIR will be implemented.

B. Environmental Impact Report (EIR)

The EIR for the Campus Master Plan amendment identifies significant effects on the environment that may occur as a result of the Project's facilities improvements at the College of San Mateo. In accordance with CEQA Guidelines Section 15091, the Board is adopting the following findings. In addition, it is adopting a Mitigation Monitoring and Reporting Program

(MMRP) to report on and/or monitor the mitigation measures incorporated to avoid or substantially lessen significant environmental effects to ensure they will be implemented.

C. Record of Proceedings

For the purposes of CEQA, and the findings herein set forth, the administrative record for the Project consists of those items listed in Public Resources Code section 21167.6, subdivision (e). The record of proceedings for the District's decision on the Project can be reviewed at the District's office. Pursuant to Guidelines section 15091(e), the administrative record of these proceedings is located, and may be obtained there.

San Mateo County Community College District
3401 CSM Drive
San Mateo, CA 94402
Contact: Barbara Christensen

D. Overview of the Project

The Campus Master Plan amendment identifies planned improvements at each of the District's three campuses—Cañada College, College of San Mateo (CSM), and Skyline College—to continue the modernization and renovation work that began with adoption of the District's 2001 and 2006 facilities master plans. The improvements at each of the campuses include building modernization and renovation; building demolition and new building construction; landscape, hardscape and pedestrian walkway improvements; parking expansion/reconfiguration and roadway modifications; and renewable energy and water conserving installations.

The District has identified the following objective for the Project:

- To better serve approximately the same number of current students and staff at each campus and to prepare students for universities and high-demand jobs, the District plans to provide modern facilities and technology for the foreseeable future; improve access for disabled students; ensure classrooms meet earthquake, fire and safety requirements; replace aging infrastructure with energy efficient systems; improve pedestrian flow between buildings, make landscape and hardscape improvements, and better align parking lots and roadways.

The following findings pertain to the facility improvements planned for College of San Mateo, located in the City of San Mateo. The improvements are listed in Table 1.

Table 1. Proposed Facilities Improvements at College of San Mateo

Proposed Improvement	Facility	Approximate Size
Building Demolition	• Building 8, Gymnasium	56,000 sf
	• Building 12, East Hall	22,376 sf
	• Building 19, Emerging Technologies	30,856 sf
New Building Construction	• Building 8, Gymnasium	75,000–80,000 sf
	• Building 19, Center for Innovation and Emerging Technologies	53,250 sf
Modernization and Renovation	• Building 1, Public Safety/Multi-Disciplinary • Building 3, Humanities/Arts • Building 7, Facilities Maintenance Center • Building 9, Library/KCSM Television and Radio • Building 17, Student Support Services • Building 34, Fire Science/Information Technology Services Management • Corporation Yard	--[a]
Potential Renewable Energy Installations	• Lots 1, 2, and/or 9 (solar)	30 kwh/sf/yr (maximum)
	• Building 7, Facilities Maintenance Center (cogeneration)	30 kwh/sf/yr (maximum)
	• Buildings 5 and 8 (solar and/or solar thermal)	30 kwh/sf/yr (maximum)
	• Building 9 (Potential vertical axis turbine adjacent to B9)	30 kwh/sf/yr (maximum)

Notes:

[a] Modernization and renovation could include interior and exterior improvements, but the overall building structures and size would not change.

sf = square feet

kwh/sf/yr = kilowatt-hours per square foot per year

II. FINDINGS REQUIRED UNDER CEQA

A. Explanation of Findings

Prior to approval of a project, the Final EIR must be certified pursuant to Section 15090 of the CEQA Guidelines. When a certified Final EIR identifies one or more significant environmental impacts, the approving agency must make one or more of the following findings, accompanied by a brief explanation of the rationale for each identified significant impact (Section 15091 of the CEQA Guidelines):

a. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

b. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency, or can and should be adopted by such other agency.

c. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the environmental impact report.

By way of explanation: finding a. is used when a mitigation measure is being adopted to address the Project's significant impacts; finding b. is used when another agency has responsibility for adopting the mitigation measure; and finding c. is used when either a mitigation measure or an alternative identified in the Final EIR is infeasible. No findings are required for impacts that are less than significant and require no mitigation. Section 15092 of the CEQA Guidelines states that after consideration of a Final EIR, and in conjunction with making the Section 15091 findings identified above, the lead agency may approve the project.

These findings constitute the District's best efforts to set forth the evidentiary and policy bases for its decision to approve the Project in a manner consistent with the requirements of CEQA. To the extent that these findings conclude that various proposed mitigation measures outlined in the Final EIR are feasible, the District hereby binds itself to implement these measures. These findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect when the District adopts a resolution approving the Project.

The full descriptions of the following impacts and mitigation measures are contained in the Final EIR for the Project. The descriptions are incorporated herein by reference.

B. Adopted Findings on Environmental Impacts

Aesthetics

Impact CSM-AES-1: Result in temporary visual impacts caused by construction activities.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following two mitigation measures to reduce this impact to a less than significant level.

CSM-AES-1: Limit exterior construction activities to daylight hours at the College of San Mateo within 0.25 mile of residences. Limiting construction that is within the viewline of nearby residences to daylight hours avoids the use of lights that at night might otherwise be visually intrusive.

CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at the College of San Mateo. This measure ensures that the project will not raise dust and thereby create a visual impact.

Impact CSM-AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CSM-AES-4: Apply minimum lighting standards at the College of San Mateo. This measure establishes specific requirements to minimize lighting at night when buildings are empty and to minimize the effects of outdoor lighting by specifying types of lighting and shielding requirements.

Air Quality and Energy

Impact CSM-AQE-2: Violate a BAAQMD air quality standard or substantially contribute to an existing or projected air quality violation during Project construction.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following five mitigation measures to reduce this impact to a less than significant level.

CSM-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo. This will ensure that the construction contractor implements the basic control measures to reduce NO_X emissions from construction equipment that are recommended by the Bay Area Air Quality Management District (BAAQMD). Together, measures CSM-AQE-1 through CSM-AQE-4 will maintain potential NO_X emissions below the threshold level.

CSM-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo. This requires the construction contractor implement the additional NO_X emissions control measures promulgated by BAAQMD. Together, measures CSM-AQE-1 through CSM-AQE-4 will maintain potential NO_X emissions below the threshold level.

CSM-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at the College of San Mateo. This requires the use of Tier 4 engines for construction equipment. It will reduce DPM, Reactive Organic Gases (ROG), and NO_X emissions that would otherwise come from construction equipment. Together, measures CSM-AQE-1 through CSM-AQE-4 will maintain potential NO_X emissions below the threshold level.

CSM-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at the College of San Mateo. This measure commits the District to entering into a development mitigation contract with BAAQMD in order to reduce criteria pollutant emissions generated during construction of the Project to quantities below the numeric BAAQMD thresholds. The measure identifies specific contents of the contract to ensure that the offsets will be real. Together, measures CSM-AQE-1 through CSM-AQE-4 will maintain potential NO_X emissions below the threshold level.

CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at the College of San Mateo. This measure specifies the measures that the District will undertake to meet the BAAQMD's reduction standards. These will ensure that the project does not exceed BAAQMD thresholds for particulate matter emissions.

Impact CSM-AQE-4: Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The BAAQMD thresholds for criteria pollutants are thresholds for both individual impacts and for the level at which an individual impact would be cumulatively considerable. The Board has adopted the following five mitigation measures which reduce the impact to a less than significant level. The measures reduce this impact in the manner discussed in Impact CSM-AQE-2 above so that the project will not make a cumulatively considerable contribution to the air basin's non-attainment.

CSM-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo. This will ensure that the

construction contractor implements the basic control measures to reduce NO_X emissions from construction equipment that are recommended by the Bay Area Air Quality Management District (BAAQMD). Together, measures CSM-AQE-1 through CSM-AQE-4 will maintain potential NO_X emissions below the threshold level.

CSM-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at the College of San Mateo. This requires the construction contractor implement the additional NO_X emissions control measures promulgated by BAAQMD. Together, measures CSM-AQE-1 through CSM-AQE-4 will maintain potential NO_X emissions below the threshold level.

CSM-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at the College of San Mateo. This requires the use of Tier 4 engines for construction equipment. It will reduce DPM, Reactive Organic Gases (ROG), and NO_X emissions that would otherwise come from construction equipment. Together, measures CSM-AQE-1 through CSM-AQE-4 will maintain potential NO_X emissions below the threshold level.

CSM-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at the College of San Mateo. This measure commits the District to entering into a development mitigation contract with BAAQMD in order to reduce criteria pollutant emissions generated during construction of the Project to quantities below the numeric BAAQMD thresholds. The measure identifies specific contents of the contract to ensure that the offsets will be real. Together, measures CSM-AQE-1 through CSM-AQE-4 will maintain potential NO_X emissions below the threshold level.

CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at the College of San Mateo. This measure specifies the measures that the District will undertake to meet the BAAQMD's reduction standards. These will ensure that the project does not exceed BAAQMD thresholds for particulate matter emissions.

Impact CSM-AQE-5: Expose existing sensitive receptors to substantial pollutant concentrations during construction.

Findings:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures identified in the environmental impact report.

Supporting Evidence:

The Board has adopted the following four mitigation measures to reduce this temporary impact, but not to a less than significant level.

CSM-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at College of San Mateo. This requires the construction contractor implement the additional NO_X emissions control measures promulgated by BAAQMD.

CSM-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at College of San Mateo. This requires the use of Tier 4 engines for construction equipment. It will reduce DPM, Reactive Organic Gases (ROG), and NO_X emissions that would otherwise come from construction equipment.

CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at College of San Mateo. This measure specifies the measures that the District will undertake to meet the BAAQMD's reduction standards. These will ensure that the project does not exceed BAAQMD thresholds for particulate matter emissions.

CSM-AQE-6: Install filtration systems on ventilation and recirculation systems at the College of San Mateo. This will require the District to install filtration systems on ventilation and recirculation systems within onsite residences where the BAAQMD PM2.5 concentration thresholds are exceeded after application of other onsite construction air quality mitigation measures. The measure specifies the minimum quality filter required, and provides for future maintenance to ensure that filtration continues as long as necessary.

This impact would be less than significant with mitigation at onsite receptors, but significant and unavoidable at offsite receptors, even with mitigation. Additional mitigation is infeasible for practical reasons. Specifically, the District does not have the authority to require offsite receptors to install the filtration systems or to otherwise comply with the provisions of CSM-AQE-6.

Biological Resources

Impact CSM-BIO-1: Impact special-status plant species.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CSM-BIO-1: Implement special-status plant species avoidance and revegetation measures at the College of San Mateo. This will require the District to retain a qualified botanist to undertake a blooming season survey of any areas of proposed construction disturbance that contain suitable habitat for western leatherwood, fragrant fritillary, congested-headed hayfield tarplant, Choris' popcornflower, and showy Rancheria clover. The surveys will be conducted in accordance with CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. If any such plants are encountered, the District would prepare a revegetation and monitoring plan as specified in this measure. The plan includes performance measures to ensure successful revegetation.

Impact CSM-BIO-2: Impact special-status bird species.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CSM-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at the College of San Mateo. This will require that prior to any construction activities scheduled during the bird nesting season (February 1 to August 31), the District retain a qualified wildlife biologist to conduct preconstruction surveys for nesting birds, including raptors. The measure establishes requirements for avoidance including the removal of nonactive nests outside of the nesting season and, if active nests are found on the building or in the affected area, a halt to demolition until the biologist verifies that all nests on the building are inactive.

Impact CSM-BIO-3: Impact special-status bats.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CSM-BIO-3: Implement fringed myotis, pallid bat, and hoary bat avoidance measures at the College of San Mateo. This will require that prior to any construction activities at sites offering suitable bat roosting habitat, the District retain a qualified wildlife biologist to conduct preconstruction surveys for fringed myotis, pallid bat, and hoary bat. The measure prescribes specific avoidance and minimization measures that will be refined in coordination with the California Department of Fish and Wildlife to ensure their effectiveness.

Impact CSM-BIO-4: Impact native wildlife nursery sites.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CSM-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at the College of San Mateo. This will require that prior to any construction activities scheduled during the bird nesting season (February 1 to August 31), the District retain a qualified wildlife biologist to conduct preconstruction surveys for nesting birds, including raptors. The measure establishes requirements for avoidance including the removal of nonactive nests outside of the nesting season and, if active nests are found on the building or in the affected area, a halt to demolition until the biologist verifies that all nests on the building are inactive.

Cultural Resources

Impact CSM-CUL-2: Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CSM-CUL-1: Stop work if cultural resources are encountered during ground-disturbing activities at the College of San Mateo. This will ensure the construction specifications include a stop work order if prehistoric or historic-period cultural materials are unearthed during ground-disturbing activities, until a qualified archaeologist and Native American representative can assess the significance of the find. Where the find is significant, the archaeologist, in consultation with the Native American representative, will develop a treatment plan that could include site avoidance, capping, or data recovery.

Impact CSM-CUL-4: Disturb any human remains, including those interred outside of formal cemeteries.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CSM-CUL-2: Stop work if human remains are encountered during ground-disturbing activities at the College of San Mateo. This measure will ensure the construction specifications include a stop work order if human remains are discovered during construction or demolition. It will require that any remains be treated in accordance with Section 7050.5(b) of the California Health and Safety Code. That code includes specific requirements for the proper treatment of Native American remains.

Geology, Soils, and Paleontology

Impact CSM-GEO-2: Expose people or structures to strong seismically induced groundshaking.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CSM-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at the College of San Mateo and comply with recommendations. This will require the District to have a qualified engineer prepare design-level geotechnical investigations for each Project element involving human occupation. The geotechnical investigation report will include recommendations to ensure the building is designed in accordance with the specifications of CGS Special Publication 117, *Guidelines for Evaluating and Mitigating Seismic Hazards*, and the requirements of the Seismic Hazards Mapping Act, which will minimize the structural damage and risk to humans from seismically induced groundshaking.

Impact CSM-GEO-5: Result in loss of topsoil as a result of Project construction and operation.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CSM-GEO-2: Stockpile topsoil removed during construction at the College of San Mateo and reuse stockpiled topsoil during revegetation. Under this measure, the contractor(s) retained for construction and revegetation of the Project will stockpile excavated topsoil on disturbed areas within the campus boundaries (e.g., parking lot expansion areas) so that it can be reused for revegetation on the campus as needed. To ensure maximum topsoil recovery, topsoil will be stockpiled separately from other excavated materials and covered. Revegetation and landscaping will use stockpiled topsoil.

Impact CSM-GEO-7: Increase risk of damage to Project structures as a result of Project location on expansive soils.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Cañada College and comply with recommendations. This will require the District to have a qualified engineer prepare design-level geotechnical

investigations for each Project element involving human occupation. The geotechnical investigation report will include recommendations to ensure the building is designed in accordance with the specifications of CGS Special Publication 117, *Guidelines for Evaluating and Mitigating Seismic Hazards*, and the requirements of the Seismic Hazards Mapping Act, which will minimize the structural damage and risk to humans from seismically induced groundshaking.

Greenhouse Gases

Impact CSM-GHG-1: Generate GHG emissions during project construction.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measures to reduce this impact to a less than significant level.

CSM-GHG-1: Where feasible, implement BAAQMD's best management practices for GHG emissions at College of San Mateo. This will require all construction contractors to implement the BAAQMD-recommended best management practices to reduce GHG emissions. These include using alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment in at least 15% of the fleet, using at least 10% local building materials, and recycling at least 50% of construction waste or demolition materials.

CSM-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at College of San Mateo. This measure specifies the measures that the District will undertake to meet the BAAQMD's reduction standards. These will ensure that the project does not exceed BAAQMD thresholds for particulate matter emissions.

Hazards and Hazardous Materials

Impact CSM-HAZ-1: Cause a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during Project construction or from Project operation.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CSM-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at the College of San Mateo. Under this measure, the contractors will develop (subject to District review and approval) and implement a spill prevention, control, and countermeasure program (SPCCP) to minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities. The SPCCP will be completed before any construction or demolition activities begin. The measure includes performance standards for the treatment of any reportable spill to ensure that impacts will be kept below a level of significance.

Impact CSM-HAZ-2: Cause 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 during Project construction.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measures to reduce this impact to a less than significant level.

CSM-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at the College of San Mateo. This measure requires the construction specifications to include specific performance standards to protect construction workers and/or the public from known or previously undiscovered soil and groundwater contamination during construction activities. Prior to excavation, a Site Safety Plan (soil and groundwater management plan) will be prepared, as specified in the measure.

CSM-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at the College of San Mateo. This measure provides that to protect construction workers and the public from known or undiscovered hazardous building materials, including asbestos and lead, all demolition activities will be undertaken in accordance with the California Occupational Safety and Health Administration standards contained in Title 8 of the California Code of Regulations.

Impact CSM-HAZ-4: Emit or involve handling of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measures to reduce this impact to a less than significant level.

CSM-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at the College of San Mateo. Under this measure, the contractors will develop (subject to District review and approval) and implement a spill prevention, control, and countermeasure program to minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities. The SPCCP will be completed before any construction or demolition activities begin. The measure includes performance standards for the treatment of any reportable spill to ensure that impacts will be kept below a level of significance.

CSM-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at the College of San Mateo. This measure requires the construction specifications to include specific performance standards to protect construction workers and/or the public from known or previously undiscovered soil and groundwater contamination during construction activities. Prior to excavation, a Site Safety Plan (soil and groundwater management plan) will be prepared, as specified in the measure.

CSM-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at the College of San Mateo. This measure provides that to protect construction workers and the public from known or undiscovered hazardous building materials, including asbestos and lead, all demolition activities will be undertaken in accordance with the California Occupational Safety and Health Administration standards contained in Title 8 of the California Code of Regulations.

Impact CSM-HAZ-6: Interfere with adopted emergency response plan or emergency evacuation plan.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CSM-TRA-1: Implement a Traffic Control Plan during construction at the College of San Mateo. This will require the construction contractor(s) to develop a traffic control plan, consistent with the performance measures set out in the mitigation measure, to minimize the effects of construction traffic on the surrounding area. The plan will be subject to review and approval by the District.

Impact CSM-HAZ-7: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measures to reduce this impact to a less than significant level.

CSM-HAZ-4: Comply with legal requirements for fire prevention during construction activities at the College of San Mateo. This measure requires compliance with Public Resources Code Sections 4427 (distance from construction equipment), 4428 (fire suppression equipment on site), 4431 (distance from gasoline-powered power tools), and 4442 (spark arrestors on internal combustion engine equipment) which will ensure that fire hazard is minimized.

CSM-HAZ-5: Create and maintain adequate firebreaks and practice fire prevention at the College of San Mateo. This establishes fire prevention measures at the campus, including fire breaks, availability of extinguishers, and compliance with County and state fire safety requirements, to be implemented for the duration of Project operations.

Hydrology and Water Quality

Impact HYD-1: Violate any water quality standards or waste discharge requirements and/or otherwise substantially degrade water quality.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following four mitigation measures to reduce this impact to a less than significant level.

CSM-HYD-1: Implement erosion-control measures to protect water quality during construction at College of San Mateo. The District will ensure the Project's construction specifications include the storm water pollution prevention plan to minimize the mobilization of sediment to storm drains and adjacent water bodies. This measure identifies the requirements of that plan.

CSM-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at College of San Mateo. This measure will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit stormwater runoff and provide for onsite treatment of contaminants. It includes specific performance standards to ensure its effectiveness.

CSM-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at the College of San Mateo. Under this measure, the contractors will develop (subject to District review and approval) and implement a spill prevention, control, and countermeasure program to minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities. The SPCCP will be completed before any construction or demolition activities begin. The measure includes performance standards for the treatment of any reportable spill to ensure that impacts will be kept below a level of significance.

CSM-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at the College of San Mateo. This measure requires the construction specifications to include specific performance standards to protect construction workers and/or the public from known or previously undiscovered soil and groundwater contamination during construction activities. Prior to excavation, a Site Safety Plan (soil and groundwater management plan) will be prepared, as specified in the measure.

Impact HYD-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CSM-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at College of San Mateo. This measure will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit stormwater runoff and provide for onsite treatment of contaminants. It includes specific performance standards to ensure its effectiveness.

Impact HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following two mitigation measures to reduce this impact to a less than significant level.

CSM-HYD-1: Implement erosion-control measures to protect water quality during construction at College of San Mateo. The District will ensure the Project's construction specifications include the storm water pollution prevention plan to minimize the mobilization of sediment to storm drains and adjacent water bodies. This measure identifies the requirements of that plan.

CSM-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at College of San Mateo. This measure will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit stormwater runoff and provide for onsite treatment of contaminants. It includes specific performance standards to ensure its effectiveness.

Impact HYD-4: Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CSM-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at College of San Mateo. This measure will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit stormwater runoff and provide for onsite treatment of contaminants. It includes specific performance standards to ensure its effectiveness.

Impact HYD-5: Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place within a 100-year flood hazard area structures that would impede or redirect flood flows.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CSM-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at College of San Mateo. This measure will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit stormwater runoff and provide for onsite treatment of contaminants. It includes specific performance standards to ensure its effectiveness.

Noise

Impact CSM-NOI-1: Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CSM-NOI-1: Employ noise-reducing construction practices at the College of San Mateo. This will require the contractor to employ noise-reducing construction practices to limit noise to be in compliance with the county noise standards between the hours of 6:00 p.m. and 7:00 a.m. weekdays, 5:00 p.m. and 9:00 a.m. on Saturdays, or at any time on Sundays, Thanksgiving and Christmas. The measure includes specific performance standards to ensure it will be effective.

Impact CSM-NOI-4: Result in a temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CSM-NOI-1: Employ noise-reducing construction practices at the College of San Mateo. This will require the contractor to employ noise-reducing construction practices to limit noise to be in compliance with the county noise standards between the hours of 6:00 p.m. and 7:00 a.m. weekdays, 5:00 p.m. and 9:00 a.m. on Saturdays, or at any time on Sundays, Thanksgiving and Christmas. The measure includes specific performance standards to ensure it will be effective.

Transportation and Traffic

Impact CSM-TRA-4: Result in potential construction impacts on traffic operation and circulation, transit service, nonmotorized transportation facilities, and emergency access.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less than significant level.

CSM-TRA-1: Implement a Traffic Control Plan during construction at the College of San Mateo. This will require the construction contractor(s) to develop a traffic control plan, consistent with the performance measures set out in the mitigation measure, to minimize the effects of construction traffic on the surrounding area. The plan will be subject to review and approval by the District.

III. FINDINGS REGARDING THE PROJECT ALTERNATIVES

As required by CEQA, a discussion of possible alternatives to the Campus Master Plan amendment. In addition to the No-Project Alternative, the EIR examined one alternative for each campus—Cañada College, CSM, and Skyline College. With adoption of the Project, the Board makes the following findings to support its rejection of the No-Project and CSM campus alternatives.

Public Resources Code section 21002 provides that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]" The CEQA Guidelines defines "feasible" to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors." (CEQA Guidelines Section 15364) The concept of "feasibility" also encompasses the question of whether a particular alternative promotes the underlying objectives of a project. (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417.) "'[F]easibility' under CEQA also encompasses 'desirability' to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors." (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417; *Sequoyah Hills Homeowners Assn. v. City of Oakland* (1993) 23 Cal.App.4th 704, 715.)

No Project Alternative: Under this alternative, the proposed facilities improvements would not be made and the CSM campus would continue to function as it does currently. Over time, activities on the campus would likely have a somewhat smaller impact on energy use, stormwater quality, and water demand than under existing conditions due to continued implementation of the campus sustainability plan.

***Finding*:**

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the project alternatives identified in the environmental impact report.

Supporting Evidence:

By retaining the status quo, the No Project Alternative would not meet the objectives to provide modern facilities and technology for the foreseeable future; improve access for disabled students; ensure classrooms meet earthquake, fire and safety requirements; replace aging infrastructure with energy efficient systems; improve pedestrian flow between buildings, make landscape and hardscape improvements, and better align parking lots and roadways.

The No Project alternative is inconsistent with District sustainability policies intended to reduce the overall impact of campus operation. Specifically, this alternative would limit the District's ability to meet the objectives of the *College of San Mateo Sustainability Plan* to substantially reduce energy use and increase water conservation and efficiency. The objectives cannot be met without modernization of the campus and the replacement of older buildings with more energy- and water-efficient ones.

Additional Solar Energy Alternative: Under this alternative, the District would install additional solar energy recovery systems on campus in those parking lots that are not slated for solar energy recovery systems in the Project. The additional renewable energy capacity would help to offset the GHG emissions from campus operations. The alternative would otherwise include the same features as the Project.

***Finding*:**

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the project alternatives identified in the environmental impact report.

Supporting Evidence:

The Project is designed to minimize greenhouse gas (GHG) emissions from operations and, with energy conservation measures and renewable energy facilities built into the Project, will not have significant operational emissions. GHG emissions resulting from construction activities will be less than significant with the implementation of mitigation measures CSM-GHG-1 and CSM-AQE-5 described above. This alternative is not necessary because the Project, as mitigated, would not result in a significant effect on the environment. The District chooses to employ the two mitigation measures rather than install more solar energy facilities than already proposed. Additional solar facilities have the disadvantage of somewhat increasing the visual impact of the Project. The mitigation measures would not have that disadvantage.

IV. STATEMENT OF OVERRIDING CONSIDERATIONS

The Final EIR for the Project concluded that there would be a significant and unavoidable environmental impact on air quality during construction at the College of San Mateo. Pursuant to CEQA Guidelines Section 15093, if it is to approve the Project, the Board must adopt a Statement of Overriding Consideration describing the Project's economic, legal, social, technological or other benefits. The following Statement of Overriding Considerations describes the specific Project benefits that outweigh its significant, unavoidable impact.

The Final EIR disclosed that the Project will expose existing offsite receptors to pollutant concentrations during construction (Impact CSM-AQE-5). Construction-related diesel particulate matter (DPM) and fine particulate matter (PM2.5) at the College of San Mateo would exceed thresholds for pollutant concentrations established by the Bay Area Air Quality Management District. This impact would be temporary. As described in the above findings, the District has adopted several mitigation measures to reduce this impact below a level of significance as it applies to onsite receptors.

The Board finds that the following Project benefits outweigh this significant impact.

- The Project will replace old Buildings 8 (Gymnasium – Kinesiology/Wellness) and 19 (Emerging Technologies - Center for Innovation and Emerging Technologies) with new, energy-efficient buildings that will advance the College of San Mateo's sustainability goals. This includes Goal 4 (The Built Environment), Goal 5 (Energy Efficiency), and Goal 6 (Water Conservation) of the *College of San Mateo Sustainability Plan*.

- The Project will modernize and renovate existing Buildings 1 (Public Safety/Multidisciplinary), 3 (Humanities/Arts), 9 (Library and KCSM television and radio), 17 (Student Support Services), and 34 (Fire Science/Information Technology Services Management) to better support classroom instruction and student support services needs. This will also provide the opportunity to improve energy and water use efficiency in these buildings.

- The Project will continue the overall campus renovation begun with the 2006 Campus Master Plan. This will incorporate sustainable design practices into the campus to increase energy efficiency and reduce water usage; improve storm water drainage management to advance the goal of achieving a "net-zero" runoff rate, thereby reducing the potential for surface water pollution; provide Americans with Disabilities Act compliant walkways and buildings; and improve the teaching and learning environment through campus modernization and rejuvenation.

- The Project includes renewable energy installations that will reduce College of San Mateo operational costs by offsetting energy purchases, provide leadership in the education of students to support sustainable lifestyles, and raise awareness in the community about the potential of renewable energy.

San Mateo County Community College District
2015 Facilities Master Plan Amendment
Final Environmental Impact Report
Findings of Fact for Skyline College

I. INTRODUCTION

A. CEQA Process

The San Mateo County Community College District (District) analyzed the Campus Master Plan amendment (Project), including proposed facilities improvements at Skyline College, on the basis of the California Environmental Quality Act (CEQA, Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (14 CCR 15000, et seq.) and prepared an environmental impact report (EIR) disclosing the significant environmental impacts of the Project. The Final EIR prepared by the District determined that the Project could have potentially significant effects on the environment, all of which can be avoided or reduced below the level of significance by mitigation measures.

Consistent with CEQA's requirements, the Draft EIR was circulated for a public comment period beginning on August 28, 2015 and ending on October 12, 2015. All written comments received during the public comment period were responded to in Chapter 2 of the Final EIR.

Prior to approving the Project, the District's Board of Trustees (Board) will certify that it has considered the Final EIR, that the Final EIR adequately meets the requirements of CEQA, and the Final EIR reflects the independent judgment of the Board. Upon approving the Project, the Board will adopt the following findings of fact regarding the significant effects and the alternatives identified in the Final EIR.

Pursuant to Public Resources Code (PRC) Section 21081.6, the Board is also adopting a mitigation monitoring and reporting program (MMRP) for the mitigation measures that are the Board's responsibility to implement. The MMRP establishes a program to ensure that the adopted mitigation measures identified in the Final EIR will be implemented.

B. Environmental Impact Report (EIR)

The EIR for the Campus Master Plan amendment identifies several significant effects on the environment that may occur as a result of the Project's facilities improvements at Skyline College. In accordance with CEQA Guidelines Section 15091, the Board is adopting the following findings. In addition, it is adopting a Mitigation Monitoring and Reporting Program (MMRP) to report on and/or monitor the mitigation measures incorporated to avoid or substantially lessen significant environmental effects to ensure they will be implemented.

C. Record of Proceedings

For the purposes of CEQA, and the findings herein set forth, the administrative record for the Project consists of those items listed in Public Resources Code section 21167.6, subdivision (e). The record of proceedings for the District's decision on the Project can be reviewed at the District's office. Pursuant to Guidelines section 15091(e), the administrative record of these proceedings is located, and may be obtained there.

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D. Overview of the Project

The Campus Master Plan amendment identifies planned improvements at each of the District's three campuses—Cañada College, College of San Mateo (CSM), and Skyline College—to continue the modernization and renovation work that began with adoption of the District's 2001 and 2006 facilities master plans. The improvements at each of the campuses include building modernization and renovation; building demolition and new building construction; landscape, hardscape and pedestrian walkway improvements; parking expansion/reconfiguration and roadway modifications; and renewable energy and water conserving installations.

The District has identified the following objective for the Project:

- To better serve approximately the same number of current students and staff at each campus and to prepare students for universities and high-demand jobs, the District plans to provide modern facilities and technology for the foreseeable future; improve access for disabled students; ensure classrooms meet earthquake, fire and safety requirements; replace aging infrastructure with energy efficient systems; improve pedestrian flow between buildings, make landscape and hardscape improvements, and better align parking lots and roadways.

The following findings pertain to the facility improvements planned for Skyline College, located in the City of San Bruno. The improvements are listed in Table 1.

Table 1. Proposed Facilities Improvements at Skyline College

Proposed Improvement	Facility	Approximate Size
Building Demolition	• Building 1, Social Science/Creative Arts Programs	78,000 sf
	• Buildings 19 and 20 (Pacific Heights)	39,000 sf
New Building Construction	• Building 1, Social Science/Creative Arts Programs	120,000 sf
	• Building 12, Environmental Sciences	20,000 sf
	• Boiler Room and Utilities Plant	3,000–5,000 sf
	• Building 15, Career and Sustainable Technology	8,500–10,000 sf
	• Residential Complex	Up to 71 units (47 single-family and 24 multi-family) on 8 acres
Modernization and Renovation	• Building 2, Workforce/Economic Development Prosperity Center • Building 5, Library/Learning Resource Center • Building 14, Early Childhood Education (Loma Chica)	--[a]
Pedestrian Improvements	• South Pedestrian Gateway, south of Building 1	200,000 sf[b]
	• Pedestrian connection between Environmental Sciences Building and Building 8	400 feet long[b]
Parking Lot Expansion	• Lot L	125–175 new parking stalls
Potential Renewable Energy Installations	• Building 1/1A (cogeneration, energy storage, solar thermal)	30 kwh/sf/yr (maximum)
	• Lots 1,2 and/or 9 (solar)	30 kwh/sf/yr (maximum)

Notes:

[a] Modernization and renovation could include interior and exterior improvements, but the overall building structures and size would not change.

[b] The size of the pedestrian improvements is unknown at this time but is estimated to be within the currently paved or disturbed area identified in the table, based on the area shown in **Figure ES-3**.

sf = square feet

kwh/sf/yr = kilowatt-hours per square foot per year

II. FINDINGS REQUIRED UNDER CEQA

A. Explanation of Findings

Prior to approval of a project, the Final EIR must be certified pursuant to Section 15090 of the CEQA Guidelines. When a certified Final EIR identifies one or more significant environmental impacts, the approving agency must make one or more of the following findings, accompanied by a brief explanation of the rationale for each identified significant impact (Section 15091 of the CEQA Guidelines):

a. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

b. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency, or can and should be adopted by such other agency.

c. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the environmental impact report.

By way of explanation: finding a. is used when a mitigation measure is being adopted to address the Project's significant impacts; finding b. is used when another agency has responsibility for adopting the mitigation measure; and finding c. is used when either a mitigation measure or an alternative identified in the Final EIR is infeasible. No findings are required for impacts that are less than significant and require no mitigation. Section 15092 of the CEQA Guidelines states that after consideration of a Final EIR, and in conjunction with making the Section 15091 findings identified above, the lead agency may approve the project.

These findings constitute the District's best efforts to set forth the evidentiary and policy bases for its decision to approve the Project in a manner consistent with the requirements of CEQA. To the extent that these findings conclude that various proposed mitigation measures outlined in the Final EIR are feasible and have not been modified, superseded or withdrawn, the District hereby binds itself to implement these measures. These findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect when the District adopts a resolution approving the Project.

The full descriptions of the following impacts and mitigation measures are contained in the Final EIR for the Project. The descriptions are incorporated herein by reference.

B. Adopted Findings on Environmental Impacts

Aesthetics

Impact SC-AES-1: Result in temporary visual impacts caused by construction activities.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following two mitigation measures to reduce this impact to a less-than-significant level.

SC-AES-1: Limit exterior construction activities to daylight hours at Skyline College within 0.25 mile of residences. Limiting construction that is within the viewline of nearby residences to daylight hours avoids the use of lights that at night might otherwise be visually intrusive.

SC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Skyline College. This measure ensures that the project will not raise dust and thereby create a visual impact.

Impact SC-AES-2: Substantially degrade the existing visual character or quality of the site and its surroundings, including views from scenic vistas.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduce the impact to a less-than-significant level.

SC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Skyline College. This measure establishes specific design requirements for roofing materials and exterior treatments that will reduce the visibility of the new buildings.

SC-AES-3: Ensure new residential development blends with existing residential development at Skyline College. This will require that the new residential development blends with adjacent existing residential development. New development will be designed to be consistent in height and massing and have similar façade and landscaping to existing development.

Impact SC-AES-3: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduce the impact to a less-than-significant level.

SC-AES-2: Apply aesthetic design treatments to buildings within scenic views, including vistas, at Skyline College. This measure establishes specific design requirements for roofing materials and exterior treatments that will reduce the visibility of the new buildings.

Impact SC-AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure to reduce this impact to a less-than-significant level.

SC-AES-4: Apply minimum lighting standards at Skyline College. This measure establishes specific requirements to minimize lighting at night when buildings are empty and to minimize the effects of outdoor lighting by specifying types of lighting and shielding requirements.

Air Quality and Energy

Impact SC-AQE-2: Violate a BAAQMD air quality standard or substantially contribute to an existing or projected air quality violation during Project construction.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following five mitigation measures which reduce the impact to a less-than-significant level.

SC-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NOX emissions at Skyline College. This will ensure that the construction contractor implements the basic control measures to reduce NO_X emissions

from construction equipment that are recommended by the Bay Area Air Quality Management District (BAAQMD). Together, measures SC-AQE-1 through SC-AQE-4 will maintain potential NO_X emissions below the threshold level.

SC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Skyline College. This requires the construction contractor implement the additional NO_X emissions control measures promulgated by BAAQMD. Together, measures SC-AQE-1 through SC-AQE-4 will maintain potential NO_X emissions below the threshold level.

SC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Skyline College. This requires the use of Tier 4 engines for construction equipment. It will reduce DPM, Reactive Organic Gases (ROG), and NO_X emissions that would otherwise come from construction equipment. Together, measures SC-AQE-1 through SC-AQE-4 will maintain potential NO_X emissions below the threshold level.

SC-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at Skyline College. This measure commits the District to entering into a development mitigation contract with BAAQMD in order to reduce criteria pollutant emissions generated during construction of the Project to quantities below the numeric BAAQMD thresholds. The measure identifies specific contents of the contract to ensure that the offsets will be real. Together, measures SC-AQE-1 through SC-AQE-4 will maintain potential NO_X emissions below the threshold level.

SC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Skyline College. This measure specifies the measures that the District will undertake to meet the BAAQMD's reduction standards. These will ensure that the project does not exceed BAAQMD thresholds for particulate matter emissions.

Impact SC-AQE-4: Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The BAAQMD thresholds for criteria pollutants are thresholds for both individual impacts and for the level at which an individual impact would be cumulatively considerable. The Board has adopted the following five mitigation measures which reduce the impact to a less-than-significant level. The measures reduce this impact in the

manner discussed in Impact SC-AQE-2 above so that the project will not make a cumulatively considerable contribution to the air basin's non-attainment.

SC-AQE-1: Implement BAAQMD basic construction mitigation measures to reduce construction-related NOX emissions at Skyline College. This will ensure that the construction contractor implements the basic control measures to reduce NO_X emissions from construction equipment that are recommended by the Bay Area Air Quality Management District (BAAQMD). Together, measures SC-AQE-1 through SC-AQE-4 will maintain potential NO_X emissions below the threshold level.

SC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Skyline College. This requires the construction contractor implement the additional NO_X emissions control measures promulgated by BAAQMD. Together, measures SC-AQE-1 through SC-AQE-4 will maintain potential NO_X emissions below the threshold level.

SC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Skyline College. This requires the use of Tier 4 engines for construction equipment. It will reduce DPM, Reactive Organic Gases (ROG), and NO_X emissions that would otherwise come from construction equipment. Together, measures SC-AQE-1 through SC-AQE-4 will maintain potential NO_X emissions below the threshold level.

SC-AQE-4: Offset NO_X emissions generated during construction to quantities below applicable BAAQMD CEQA thresholds at Skyline College. This measure commits the District to entering into a development mitigation contract with BAAQMD in order to reduce criteria pollutant emissions generated during construction of the Project to quantities below the numeric BAAQMD thresholds. The measure identifies specific contents of the contract to ensure that the offsets will be real. Together, measures SC-AQE-1 through SC-AQE-4 will maintain potential NO_X emissions below the threshold level.

SC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Skyline College. This measure specifies the measures that the District will undertake to meet the BAAQMD's reduction standards. These will ensure that the project does not exceed BAAQMD thresholds for particulate matter emissions.

Impact SC-AQE-5: Expose existing sensitive receptors to substantial pollutant concentrations during construction.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following three mitigation measures which reduce the impact to a less-than-significant level.

SC-AQE-2: Implement BAAQMD additional construction mitigation measures to reduce construction-related NO_X emissions at Skyline College. This requires the construction contractor implement the additional NO_X emissions control measures promulgated by BAAQMD.

SC-AQE-3: Utilize clean diesel-powered equipment during construction to control construction-related DPM emissions at Skyline College. This requires the use of Tier 4 engines for construction equipment. It will reduce DPM, Reactive Organic Gases (ROG), and NO_X emissions that would otherwise come from construction equipment.

SC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Skyline College. This measure specifies the measures that the District will undertake to meet the BAAQMD's reduction standards. These will ensure that the project does not exceed BAAQMD thresholds for particulate matter emissions.

Biological Resources

Impact SC-BIO-1: Impact special-status plant species.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-BIO-1: Implement special-status plant species avoidance and revegetation measures at Skyline College. This measure will require the District to retain a qualified botanist to undertake a blooming season survey of any areas of proposed construction disturbance that contain suitable habitat for western leatherwood, fragrant fritillary, congested-headed hayfield tarplant, Choris' popcornflower, and showy Rancheria clover. The surveys will be conducted in accordance with CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities.* If any such plants are encountered, the District would prepare a revegetation and monitoring plan as specified in this measure. The plan includes performance measures to ensure successful revegetation.

Impact SC-BIO-2: Impact special-status bird species.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at Skyline College. This will require that prior to any construction activities scheduled during the bird nesting season (February 1 to August 31), the District retain a qualified wildlife biologist to conduct preconstruction surveys for nesting birds, including raptors. The measure establishes requirements for avoidance including the removal of nonactive nests outside of the nesting season and, if active nests are found on the building or in the affected area, a halt to demolition until the biologist verifies that all nests on the building are inactive.

Impact SC-BIO-3: Impact special-status bats.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-BIO-3: Implement fringed myotis, pallid bat, and hoary bat avoidance measures at Skyline College. This will require that prior to any construction activities at sites offering suitable bat roosting habitat, the District retain a qualified wildlife biologist to conduct preconstruction surveys for fringed myotis, pallid bat, and hoary bat. The measure prescribes specific avoidance and minimization measures that will be refined in coordination with the California Department of Fish and Wildlife to ensure their effectiveness.

Impact SC-BIO-4: Impact Mission blue butterfly.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measures which reduce the impact to a less-than-significant level. Avoidance of Mission blue butterfly host plants will ensure that no take of the species would occur and ensure Project compliance with Endangered Species Act.

SC-BIO-4a: Conduct presence–absence survey for Mission blue butterfly at Skyline College. The District will retain a qualified biologist with demonstrated field experience identifying Mission blue butterflies to conduct a series of four surveys of the silver lupine stands in and adjacent to (i.e., within 100 feet of) the Project footprint at the western edge of Skyline College for the presence of Mission blue butterfly. This measure establishes specific standards for conducting the surveys to ensure that they will detect any butterflies on the site.

SC-BIO-4b: Avoid impacts on Mission blue butterfly habitat during construction of the Environmental Sciences building at Skyline College. If Mission blue butterflies are detected during the surveys undertaken for mitigation measure SC-BIO-4a, the District will retain a qualified biologist experienced in silver lupine identification to delineate observed stands of this plant with a global positioning system (GPS) unit near the proposed Building 12, Environmental Sciences in the western portion of Skyline College prior to the final design of the structure. The GPS data will be used to design the Environmental Sciences building and its placement on the site to avoid the delineated patches of silver lupine. The design will provide that neither construction activities (including site preparation, materials storage, and transport) nor the location of the building eliminate any areas of silver lupine.

SC-BIO-4c: Consult with the U.S. Fish and Wildlife Service if impacts on Mission blue butterfly habitat cannot be avoided. If Mission blue butterflies are detected during presence–absence surveys and avoidance of silver lupine is not feasible, the District will consult with the U.S. Fish and Wildlife Service regarding appropriate compensatory mitigation for the loss of habitat, including possible salvage and translocation of impacted plants. This measure includes specific performance standards to ensure that if translocation of impacted plants is approved as a component of compensatory mitigation, the transplantation will be effective.

Impact SC-BIO-5: Impact California red-legged frog.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measures which reduce the impact to a less-than-significant level.

SC-HYD-1: Implement erosion-control measures to protect water quality during construction at Skyline College. The District will ensure the Project's construction specifications include the storm water pollution prevention plan to minimize the mobilization of sediment to storm drains and adjacent water bodies. This measure identifies the requirements of that plan.

SC-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at Skyline College. This measure will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit stormwater runoff and provide for onsite treatment of contaminants. It includes specific performance standards to ensure its effectiveness.

Impact SC-BIO-7: Impact native wildlife nursery sites.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-BIO-2: Implement white-tailed kite and other nesting bird avoidance measures at Skyline College. This will require that prior to any construction activities scheduled during the bird nesting season (February 1 to August 31), the District retain a qualified wildlife biologist to conduct preconstruction surveys for nesting birds, including raptors. The measure establishes requirements for avoidance including the removal of nonactive nests outside of the nesting season and, if active nests are found on the building or in the affected area, a halt to demolition until the biologist verifies that all nests on the building are inactive.

Impact SC-BIO-8: Potentially conflict with the City of San Bruno's heritage tree ordinance.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-BIO-5: Implement tree avoidance, minimization, and replacement plan at the residential development site at Skyline College. This measure provides that if there are heritage trees (as defined in Chapter 8.25 of the City of San Bruno Municipal Code) located on the residential development site that would be removed or pruned in conjunction with the development, then prior to ground disturbance, the District will apply for and receive a heritage tree removal permit from San Bruno. The District will comply with the conditions of that permit. The measure specifies performance standards for conducting a tree survey and preparing a site plan to inform the permit process.

Cultural Resources

Impact SC-CUL-2: Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-CUL-1: Stop work if cultural resources are encountered during ground-disturbing activities at Skyline College. This will ensure the construction specifications include a stop work order if prehistoric or historic-period cultural materials are unearthed during ground-disturbing activities, until a qualified archaeologist and Native American representative can assess the significance of the find. Where the find is significant, the archaeologist, in consultation with the Native American representative, will develop a treatment plan that could include site avoidance, capping, or data recovery.

Impact SC-CUL-3: Disturb any human remains, including those interred outside of formal cemeteries.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-CUL-2: Stop work if human remains are encountered during ground-disturbing activities at Skyline College. This measure will ensure the construction specifications include a stop work order if human remains are discovered during construction or demolition. It will require that any remains be treated in accordance with Section 7050.5(b) of the California Health and Safety Code. That code includes specific requirements for the proper treatment of Native American remains.

Geology, Soils, and Paleontology

Impact SC-GEO-2: Expose people or structures to strong seismically induced groundshaking.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Skyline College and comply with recommendations. This will require the District to have a qualified engineer prepare design-level geotechnical investigations for each Project element involving human occupation. The geotechnical investigation report will include recommendations to ensure the building is designed in accordance with the specifications of CGS Special Publication 117, *Guidelines for Evaluating and Mitigating Seismic Hazards*, and the requirements of the Seismic Hazards Mapping Act, which will minimize the structural damage and risk to humans from seismically induced groundshaking.

Impact SC-GEO-5: Result in loss of topsoil from Project construction and operation.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-GEO-2: Stockpile topsoil removed during construction at Skyline College and reuse stockpiled topsoil during revegetation. Under this measure, the contractor(s) retained for construction and revegetation of the Project will stockpile excavated topsoil on disturbed areas within the campus boundaries (e.g., parking lot expansion areas) so that it can be reused for revegetation on the campus as needed. To ensure maximum topsoil recovery, topsoil will be stockpiled separately from other excavated materials and covered. Revegetation and landscaping will use stockpiled topsoil.

Impact SC-GEO-6: Increase risk of landslide, liquefaction, lateral spread, subsidence, or collapse, as a result of Project location on an unstable geologic unit or soil.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Skyline College and comply with recommendations. This will require the District to have a qualified engineer prepare design-level geotechnical investigations for each Project element involving human occupation. The geotechnical investigation report will include recommendations to ensure the building is designed in accordance with the specifications of CGS Special Publication 117, *Guidelines for Evaluating and Mitigating Seismic Hazards*, and the requirements of the Seismic Hazards Mapping Act, which will minimize the structural damage and risk to humans from seismically induced groundshaking.

Impact SC-GEO-7: Increase risk of damage to Project structures as a result of Project location on expansive soils.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-GEO-1: Prepare a site-specific geotechnical investigation for all structures to be occupied by humans at Skyline College and comply with recommendations. This will require the District to have a qualified engineer prepare design-level geotechnical investigations for each Project element involving human occupation. The geotechnical investigation report will include recommendations to ensure the building is designed in accordance with the specifications of CGS Special Publication 117, *Guidelines for Evaluating and Mitigating Seismic Hazards*, and the requirements of the Seismic Hazards Mapping Act, which will minimize the structural damage and risk to humans from seismically induced groundshaking.

Impact SC-GEO-8: Result in direct or indirect destruction of a unique paleontological resource or site or unique geologic feature.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-GEO-3: Implement procedures for identifying, evaluating, and recovering paleontological resources at Skyline College. Prior to the start of any subsurface excavations that would extend beyond previously disturbed soils, all construction forepersons and field supervisors will receive training by a qualified professional paleontologist, as defined by the Society of Vertebrate Paleontology, who is experienced in teaching non-specialists, to ensure they can recognize fossil materials and will follow proper notification procedures in the event any are uncovered during construction. If a fossil is determined to be significant and avoidance is not feasible, the paleontologist will develop and implement an excavation and salvage plan in accordance with SVP standards.

Greenhouse Gases

Impact SC-GHG-1: Generate GHG emissions during Project construction.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following two mitigation measures which reduce the impact to a less-than-significant level.

SC-GHG-1: Where feasible, implement BAAQMD's best management practices for GHG emissions at Skyline College. This will require all construction contractors to implement the BAAQMD-recommended best management practices to reduce GHG emissions. These include using alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment in at least 15% of the fleet, using at least 10% local building materials, and recycling at least 50% of construction waste or demolition materials.

SC-AQE-5: Implement BAAQMD basic construction mitigation measures to reduce construction-related PM10 and PM2.5 dust at Skyline College. This measure specifies the measures that the District will undertake to meet the BAAQMD's reduction standards. These will ensure that the project does not exceed BAAQMD thresholds for particulate matter emissions.

Hazards and Hazardous Materials

Impact SC-HAZ-1: Cause a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during Project construction or from Project operation.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Skyline College. Under this measure, the contractors will develop (subject to District review and approval) and implement a spill

prevention, control, and countermeasure program (SPCCP) to minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities. The SPCCP will be completed before any construction or demolition activities begin. The measure includes performance standards for the treatment of any reportable spill to ensure that impacts will be kept below a level of significance.

Impact SC-HAZ-2: Cause 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 during Project construction.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measures which reduce the impact to a less-than-significant level.

SC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Skyline College. This measure requires the construction specifications to include specific performance standards to protect construction workers and/or the public from known or previously undiscovered soil and groundwater contamination during construction activities. Prior to excavation, a Site Safety Plan (soil and groundwater management plan) will be prepared, as specified in the measure.

SC-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at Skyline College. This measure provides that to protect construction workers and the public from known or undiscovered hazardous building materials, including asbestos and lead, all demolition activities will be undertaken in accordance with the California Occupational Safety and Health Administration standards contained in Title 8 of the California Code of Regulations.

Impact SC-HAZ-4: Emit or involve handling of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measures which reduce the impact to a less-than-significant level.

SC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Skyline College. Under this measure, the contractors will develop (subject to District review and approval) and implement a spill prevention, control, and countermeasure program to minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities. The SPCCP will be completed before any construction or demolition activities begin. The measure includes performance standards for the treatment of any reportable spill to ensure that impacts will be kept below a level of significance.

SC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Skyline College. This measure requires the construction specifications to include specific performance standards to protect construction workers and/or the public from known or previously undiscovered soil and groundwater contamination during construction activities. Prior to excavation, a Site Safety Plan (soil and groundwater management plan) will be prepared, as specified in the measure.

SC-HAZ-3: Implement measures to protect people from exposure to lead and asbestos in buildings during building renovation or demolition activities at Skyline College. This measure provides that to protect construction workers and the public from known or undiscovered hazardous building materials, including asbestos and lead, all demolition activities will be undertaken in accordance with the California Occupational Safety and Health Administration standards contained in Title 8 of the California Code of Regulations.

Impact SC-HAZ-6: Interfere with adopted emergency response plan or emergency evacuation plan.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-TRA-1: Implement a Traffic Control Plan during construction at Skyline College. This will require the construction contractor(s) to develop a traffic control plan, consistent with the performance measures set out in the mitigation measure, to minimize

the effects of construction traffic on the surrounding area. The plan will be subject to review and approval by the District.

Impact SC-HAZ-7: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-HAZ-4: Comply with legal requirements for fire prevention during construction activities at Skyline College. This measure requires compliance with Public Resources Code Sections 4427 (distance from construction equipment), 4428 (fire suppression equipment on site), 4431 (distance from gasoline-powered power tools), and 4442 (spark arrestors on internal combustion engine equipment) which will ensure that fire hazard is minimized.

SC-HAZ-5: Create and maintain adequate firebreaks and practice fire prevention at Skyline College. This establishes fire prevention measures at the campus, including fire breaks, availability of extinguishers, and compliance with County and state fire safety requirements, to be implemented for the duration of Project operations.

Hydrology and Water Quality

Impact SC-HYD-1: Violate any water quality standards or waste discharge requirements and/or otherwise substantially degrade water quality.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measures which reduce the impact to a less-than-significant level.

SC-HYD-1: Implement erosion-control measures to protect water quality during construction at Skyline College. The District will ensure the Project's construction specifications include the storm water pollution prevention plan to minimize the

mobilization of sediment to storm drains and adjacent water bodies. This measure identifies the requirements of that plan.

SC-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at Skyline College. This measure will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit stormwater runoff and provide for onsite treatment of contaminants. It includes specific performance standards to ensure its effectiveness.

SC-HAZ-1: Prepare and implement a Spill Prevention, Control, and Countermeasure Program for construction activities at Skyline College. Under this measure, the contractors will develop (subject to District review and approval) and implement a spill prevention, control, and countermeasure program to minimize the potential for and effects from spills of hazardous, toxic, or petroleum substances during construction and demolition activities. The SPCCP will be completed before any construction or demolition activities begin. The measure includes performance standards for the treatment of any reportable spill to ensure that impacts will be kept below a level of significance.

SC-HAZ-2: Prepare a site safety plan (soil and groundwater management plan) to protect people from residual soil/groundwater contamination during construction at Skyline College. This measure requires the construction specifications to include specific performance standards to protect construction workers and/or the public from known or previously undiscovered soil and groundwater contamination during construction activities. Prior to excavation, a Site Safety Plan (soil and groundwater management plan) will be prepared, as specified in the measure.

Impact SC-HYD-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at Skyline College. This measure will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit stormwater runoff and provide for onsite treatment of contaminants. It includes specific performance standards to ensure its effectiveness.

Impact SC-HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-HYD-1: Implement erosion-control measures to protect water quality during construction at Skyline College. The District will ensure the Project's construction specifications include the storm water pollution prevention plan to minimize the mobilization of sediment to storm drains and adjacent water bodies. This measure identifies the requirements of that plan.

SC-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at Skyline College. This measure will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit stormwater runoff and provide for onsite treatment of contaminants. It includes specific performance standards to ensure its effectiveness.

Impact SC-HYD-4: Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at Skyline College. This measure will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and

located to limit stormwater runoff and provide for onsite treatment of contaminants. It includes specific performance standards to ensure its effectiveness.

Impact SC-HYD-5: Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place within a 100-year flood hazard area structures that would impede or redirect flood flows.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-HYD-2: Design and maintenance of hydromodification features as postconstruction measures at Skyline College. This measure will ensure that facility improvement areas are incorporated into the design prior to the construction phase, where feasible, and located to limit stormwater runoff and provide for onsite treatment of contaminants. It includes specific performance standards to ensure its effectiveness.

Land Use and Planning

Impact SC-LUP-2: Conflict with applicable land use plans, policies, or regulations.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-LUP-1: Rezone Surplus Parcel B and amend the general plan land use designation to permit R-3 dwellings at Skyline College. The District will submit rezoning and general plan amendment applications to the City of San Bruno as necessary to ensure that the proposed residential development is consistent with the City's planning documents.

Noise

Impact SC-NOI-1: Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measures which reduce the impact to a less-than-significant level.

SC-NOI-1: Employ noise-reducing construction practices at Skyline College. This will require the contractor to employ noise-reducing construction practices to limit noise to be in compliance with the county noise standards between the hours of 6:00 p.m. and 7:00 a.m. weekdays, 5:00 p.m. and 9:00 a.m. on Saturdays, or at any time on Sundays, Thanksgiving and Christmas. The measure includes specific performance standards to ensure it will be effective.

SC-NOI-2: Prepare a detailed noise reduction analysis at the potential housing development at Skyline College. Pursuant to this measure, the District will prepare a detailed analysis of the noise reduction requirements that are needed to reduce outdoor noise to an interior level of 45 dBA in any habitable room of the residential development on Surplus Parcel B. The results of this analysis will be summarized in a report and submitted to the City of San Bruno for review and approval. The District will take the actions necessary to ensure that the recommendations of the report are incorporated into the design and construction specifications.

Impact SC-NOI-4: Result in a temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-NOI-1: Employ noise-reducing construction practices at Skyline College. This will require the contractor to employ noise-reducing construction practices to limit noise to be

in compliance with the county noise standards between the hours of 6:00 p.m. and 7:00 a.m. weekdays, 5:00 p.m. and 9:00 a.m. on Saturdays, or at any time on Sundays, Thanksgiving and Christmas. The measure includes specific performance standards to ensure it will be effective.

Public Services and Utilities

Impact SC-PSU-1: Reduce service ratios and response times for fire protection and police protection services during construction and operation.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-PSU-1: Pay the fire and police services development impact fee to the City of San Bruno for Skyline College. This measure will ensure that the Project's fair share of the fire and police services development impact fee for the development of the residential complex at Skyline College will be paid to the City of San Bruno.

Impact SC-PSU-2: Increase student enrollment at schools or increase level of service required at other public facilities resulting in an adverse physical impact to these facilities.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-PSU-2: Pay the San Bruno Park Elementary School District and San Mateo Union High School District school impact fees for Skyline College. This measure will ensure that the Project's fair share of the school impact fees will be paid to the San Bruno Park Elementary School District and San Mateo Union High School District for the development of the residential complex

Impact SC-PSU-3: Increase demand for water supply at the Project site during construction and operation.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-PSU-3: Assess the capacity of the City's water and wastewater system infrastructure and pay the capacity fees for Skyline College. This measure will ensure that if the existing water and wastewater facilities/infrastructure would need to be upgraded to serve the residential complex, then the necessary improvements are made and the Project pays its fair share of the City of San Bruno's water and wastewater capacity charges based on meter size.

Impact SC-PSU-4: Increase generation of wastewater at the Project site.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-PSU-3: Assess the capacity of the City's water and wastewater system infrastructure and pay the capacity fees for Skyline College. This measure will ensure that if the existing water and wastewater facilities/infrastructure would need to be upgraded to serve the residential complex, then the necessary improvements are made and the Project pays its fair share of the City of San Bruno's water and wastewater capacity charges based on meter size.

Recreation

Impact SC-REC-1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-REC-1: Dedicate parkland and/or pay in-lieu fees to City of San Bruno for residential development at Skyline College. Under this measure, the District or the residential complex developer will dedicate 0.9 acres of parkland or pay the equivalent in-lieu fee to the City of San Bruno in compliance with the City's park land requirement.

Transportation and Traffic:

Impact SC-TRA-4: Result in potential construction impacts on traffic operation and circulation, transit service, non-motorized transportation facilities, and emergency access.

Finding:

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The Board has adopted the following mitigation measure which reduces the impact to a less-than-significant level.

SC-TRA-1: Implement a Traffic Control Plan during construction at Skyline College. This will require the construction contractor(s) to develop a traffic control plan, consistent with the performance measures set out in the mitigation measure, to minimize the effects of construction traffic on the surrounding area. The plan will be subject to review and approval by the District.

III. FINDINGS REGARDING THE PROJECT ALTERNATIVES

As required by CEQA, a discussion of possible alternatives to the Campus Master Plan amendment. In addition to the No-Project Alternative, the EIR examined one alternative for each

campus—Cañada College, CSM, and Skyline College. With adoption of the Project, the Board makes the following findings to support its rejection of the No-Project and Skyline College campus alternatives.

Public Resources Code section 21002 provides that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]" The CEQA Guidelines defines "feasible" to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors." (CEQA Guidelines Section 15364) The concept of "feasibility" also encompasses the question of whether a particular alternative promotes the underlying objectives of a project. (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417.) "'[F]easibility' under CEQA also encompasses 'desirability' to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors." (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417; *Sequoyah Hills Homeowners Assn. v. City of Oakland* (1993) 23 Cal.App.4th 704, 715.)

No Project Alternative: Under this alternative, the proposed facilities improvements would not be made and the Skyline College campus would continue to function as it does currently. Over time, activities on the campus would likely have a somewhat smaller impact on energy use, stormwater quality, and water demand than under existing conditions due to continued implementation of the campus sustainability plan.

***Finding*:**

Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the project alternatives identified in the environmental impact report.

Supporting Evidence:

By retaining the status quo, the No Project Alternative would not meet the objectives to provide modern facilities and technology for the foreseeable future; improve access for disabled students; ensure classrooms meet earthquake, fire and safety requirements; replace aging infrastructure with energy efficient systems; improve pedestrian flow between buildings, make landscape and hardscape improvements, and better align parking lots and roadways.

The No Project alternative is inconsistent with District sustainability policies intended to reduce the overall impact of campus operation. Specifically, this alternative would inhibit the District's ability to meet the objectives of the *Skyline College Sustainability Plan* to reduce energy use and increase water conservation and efficiency. The objectives cannot be met without modernization and renovation of the campus and the replacement of older buildings with more energy and water efficient ones.

Skyline College Alternative: This alternative would propose 62 dwelling units on Surplus Parcel B (rather than the Project's 71 units), including 40 single-family homes and 22 multi-

family units. This would conform to San Bruno's current general plan density and intensity standards without the need for a general plan amendment.

***Finding*:**

Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

Supporting Evidence:

The District will pursue a zone change to a Planned Development zone that will allow more flexibility of dwelling type as long as the City of San Bruno's overall General Plan density standards are not exceeded. This approach is effectively the same as the Skyline College Alternative.