

**DRAFT**

**INITIAL STUDY / MITIGATED NEGATIVE DECLARATION  
for the  
California State Polytechnic University, San Luis Obispo  
Fermentation Sciences Center Project**

*Prepared for:*

**California State Polytechnic University, San Luis Obispo**  
1 Grand Avenue  
San Luis Obispo, California 93405

*Prepared by:*

**DUDEK**  
621 Chapala Street  
Santa Barbara, California 93101

MARCH 2017



# TABLE OF CONTENTS

---

<b><u>Section</u></b>	<b><u>Page No.</u></b>
<b>ACRONYMS AND ABBREVIATIONS.....</b>	<b>ACR-I</b>
<b>1.0 INTRODUCTION.....</b>	<b>1-1</b>
1.1 Project Overview .....	1-1
1.2 California Environmental Quality Act Compliance .....	1-5
1.3 Project Planning Setting.....	1-6
1.4 Public Review Process .....	1-7
<b>2.0 SUMMARY OF FINDINGS .....</b>	<b>2-1</b>
2.1 Environmental Factors Potentially Affected.....	2-1
2.2 Environmental Determination.....	2-2
<b>3.0 INITIAL STUDY CHECKLIST .....</b>	<b>3-1</b>
3.1 Aesthetics .....	3-1
3.2 Agriculture and Forestry Resources.....	3-4
3.3 Air Quality .....	3-6
3.4 Biological Resources .....	3-12
3.5 Cultural Resources .....	3-19
3.6 Geology and Soils .....	3-21
3.7 Greenhouse Gas Emissions.....	3-25
3.8 Hazards and Hazardous Materials .....	3-27
3.9 Hydrology and Water Quality.....	3-30
3.10 Land Use and Planning .....	3-35
3.11 Mineral Resources .....	3-36
3.12 Noise .....	3-37
3.13 Population and Housing.....	3-39
3.14 Public Services.....	3-40
3.15 Recreation .....	3-42
3.16 Transportation and Traffic .....	3-42
3.17 Utilities and Service Systems.....	3-49
3.18 Mandatory Findings of Significance.....	3-51
<b>4.0 INFORMATIONAL SOURCES .....</b>	<b>4-1</b>

**TABLE OF CONTENTS (CONTINUED)**

**Page No.**

**FIGURES**

1 Regional Map..... Fig-1

2 Project Vicinity ..... Fig-2

3 Project Site ..... Fig-3

4 Site Plan ..... Fig-4

5 Project Architectural Rendering ..... Fig-5

6 Oak Tree Locations..... Fig-6

**TABLES**

3.16-1 Programming Space Statistics..... 3-44

3.16-1 Trip Generation..... 3-46

3.16-2 Project Conditions Intersection Levels of Service..... 3-47

3.16-3 Cumulative Conditions Intersection Levels of Service ..... 3-48

**ATTACHMENTS**

- A Preliminary Focused Transportation Study – Fehr & Peers – August 7, 2013
- B Cumulative Conditions Analysis Memorandum – Fehr & Peers – August 1, 2013

## ACRONYMS AND ABBREVIATIONS

---

BMP	best management practice
Trustees	Board of Trustees of the California State University
Cal Poly San Luis Obispo	California Polytechnic State University, San Luis Obispo
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CSU	California State University
EIR	Environmental Impact Report
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
HCP	Habitat Conservation Plan
I-	Interstate
IS	Initial Study
MRZ	Mineral Resource Zone
NCCP	Natural Community Conservation Plan
NOP	Notice of Preparation
ROG	reactive organic gas
SCAQMD	South Coast Air Quality Management District
SLOCAPCD	San Luis Obispo County Air Pollution Control District
SR	State Route
SWPPP	stormwater pollution prevention plan
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

INTENTIONALLY LEFT BLANK

## 1.0 INTRODUCTION

---

### 1.1 PROJECT OVERVIEW

**Project Title:** Cal Poly San Luis Obispo Fermentation Sciences Center

**Lead Agency Name and Address**

Board of Trustees of the California State University  
401 Golden Shore  
Long Beach, California 90802

**Contact Person and Phone Number**

Julie Hawkins  
Facilities Planning & Capital Projects  
California State Polytechnic University, San Luis Obispo  
Phone: 805.756.6563  
E-mail: jkhawkin@calpoly.edu

**Project Location**

The proposed Cal Poly Fermentation Sciences Center (FSC) would be located on the existing Cal Poly campus in the County of San Luis Obispo, California (Figure 1). The Cal Poly San Luis Obispo campus is located northeast of the Highway 1–U.S. Route 101 intersection. Major streets surrounding the campus include Highway 1 (also referred to as Santa Rosa Street) and California Boulevard to the west, Stenner Creek Road to the north, U.S. Route 101 to the south, and Grand Avenue to the east (Figure 2). The proposed project site is located northwest of the corner of Highland Drive and Mt. Bishop Road on the extended campus (outside the campus core), adjacent to the Crop Units facilities in the northwest portion of campus (Figure 3).

**Project Applicant’s Name and Address**

California State Polytechnic University, San Luis Obispo  
1 Grand Avenue  
San Luis Obispo, California 93405  
Contact: Julie Hawkins

**Custodian of the Administrative Record for Project**

Refer to contact person listed above.

## **Project Objectives**

In order to meet the changing needs of the College of Agriculture, Food and Environmental Sciences at Cal Poly San Luis Obispo, which includes the Wine and Viticulture Department, the proposed project would provide dedicated space in a central location of campus for education and research activities in the fermentation sciences. Fermentation is a fundamental element in the process to create wine, beer, and distilled liquor. A growth in interest and demand for wine, craft beer, and small batch distilled liquor ensures that students with a mastery of fermentation sciences will have many professional opportunities to apply their education and skills.

The Wine and Viticulture Department has been quite successful, but relies upon resources currently distributed to a number of locations within campus; consolidating program resources and instructional space in one location would increase overall efficiency and enhance the productivity of the Department. Beer production and distilled liquor are closely related to wine making in the fermentation stage of production, but existing space limitations have restricted the ability to provide much research or education in these related practices. The Fermentation Sciences Center would include one structure dedicated to teaching and research, one structure for wine making, and one for beer and malted alcoholic beverages, and distilled liquors. Project objectives include:

- Provide approximately 42,000 gross square feet of programming space divided into three separate structures, one of the building will be approximately 12,000 gross square feet while the other two will be approximately 15,000 gross square feet;
- Consolidate and centralize fermentation sciences program resources into one area on campus;
- Construct an updated facility designed to meet the existing and future needs of the College of Agriculture, Food and Environmental Sciences in terms of academic and technical resources, and physical space, to accommodate applied fermentation sciences in the areas of wine, beer, and distilled liquor;
- Continue to utilize campus lands for the “highest and best use” and increase land use efficiency in the campus core;
- Provide public services that support the University efficiently, with the flexibility to meet changing needs;
- Cluster uses that need to be, or benefit from being, near one another, and consolidate related activities where possible and focus on efficient and effective operations with continuous operational improvements; and,
- Consider sustainability, alternative sources, self-sufficiency, life-cycle costing, and other strategies to minimize impacts on the environment.



## Local Planning Context

Due to Cal Poly San Luis Obispo’s position as a state agency, the university is not subject to local plans/policies/land use planning regulations. However, campus planning and development are guided by the *Campus Land Use and Design Guidelines* (Cal Poly San Luis Obispo 2010) and *Cal Poly Master Plan and Environmental Impact Report* (Cal Poly San Luis Obispo 2001).

**Master Plan Designation:** The project site is designated “Outdoor Teaching and Learning” as delineated in the 2001 *Cal Poly Master Plan and Environmental Impact Report* (Cal Poly San Luis Obispo 2001). This land use allows for the operation of “living laboratories” in which students acquire applied skills in an outdoor, in-field setting. Outdoor Teaching and Learning sites include agricultural field operations, animal units, and research centers.

According to the *Campus Land Use and Design Guidelines*, the proposed project site is AG-II, Cropland, which allows for horticulture and crop sciences, including laboratory, classroom, and production space associated with agriculture-related products (i.e., winery and distillery facilities). Development in this zone should take into consideration drainage impacts (Cal Poly San Luis Obispo 2010).

## Description of Project

The proposed project would provide a central location for conducting education and research in fermentation sciences, and related consumer products including wine, beer, and distilled liquor. Currently, class and research spaces are located at various locations across the campus property. The proposed project would allow for the consolidation of classes for the Wine and Viticulture Department into a single dedicated structure, thereby fostering more efficient academic and professional collaboration. The project would also provide a dedicated winery structure and a separate structure for beer production and distilled liquor production. The Fermentation Sciences Center would consequently result in centralized teaching resources for all fermentation sciences, enhancing academic efficacy in conducting program courses and associated research.

As shown in Figure 4 (Project Site Plan), the proposed project includes construction of three (3) new structures near the corner of Mt. Bishop Road and Highland Drive. The project would be constructed immediately north of the existing crop sciences building compound on the west side of Mt. Bishop Road. Vehicular access to the site would be provided via Parking Lot H-1, which connects directly to Mt. Bishop Road. Secondary vehicular access would be provided via the driveway and parking system for the adjacent Crop Science building, which connects to Highland Drive. Parking Lot H-1, which is located immediately north of the proposed project site, would be utilized for any project parking needs. The proposed structures would be a single story in height, with a more steeply sloped central roof ridge and more gently sloped

side wings. In terms of overall building height, Grange Hall would be 29 feet to the central roof ridge; for the winery and brewery buildings, the main ridge would reach 31.5 feet, with the central cupola element extending up to 36.5 feet. *Figure 5* presents a rendering of the proposed structures.

The new buildings would provide a single, central location for education pertaining to commercial fermentation; in particular, these extensive activities for the Wine and Viticulture Department are currently housed in several locations throughout campus. Beer making and liquor distillation education activity has been at a much lower scale, given current space limitations for these related fermentation practices. One building would provide a central classroom or meeting hall that would provide lecture space as well as two academic labs and a sensory lab. The majority of the other two buildings would be dedicated to production facilities and research, specifically one for wine-making and the other for beer and distilled spirits. The new facility may be used on a limited basis for product tasting, retail sales, or special events.

Construction of the proposed project is anticipated to commence in the Winter / Spring of 2018 and would take approximately 24 months to complete. Construction of the proposed project would begin with site clearing, grubbing, and mass grading which would take approximately 1 month. The next portion of construction would involve trenching activities for in-ground utility installation and would require approximately 2 months. The third portion would involve building construction and would occur over the course of 20 months. Following building construction, the site would undergo fine grading and paving which would take approximately 1 month. The construction equipment mix for grading would likely include bulldozers, motor graders, and backhoes. It is assumed that heavy construction equipment would be operating at the site for approximately 8 hours per day, 5 days per week (22 days per month), during grading operations. Construction would require approximately 25 workers during peak construction periods.

### **Surrounding Land Uses and Setting**

The project site is located northeast of the central campus core, in an agriculturally dominant portion of the campus. The project site is bounded by the E-Surplus Building, Rose Float Lab site, and associated surface parking lot to the north; the Crops Unit to the south; and active agricultural fields to the west and east.

### **Other public agencies whose approval is required:**

- Division of the State Architect: Accessibility Compliance
- State Fire Marshal: Facility Fire and Life Safety Program

- Regional Water Quality Control Board: National Pollutant Discharge Elimination System Permit
- San Luis Obispo County Air Pollution Control District: Authority to construct and/or permits to operate.
- California Department of Alcoholic Beverage Control (pertaining to any public “tasting areas” included in the proposal and the bonded winery.)

### **Permits and Approvals Required**

Implementation of the project would require discretionary approvals by the Board of Trustees of the California State University (CSU) (Trustees). Specifically, the Trustees will:

- Adopt or Certify the California Environmental Quality Act (CEQA) document
- Approve a Master Plan Amendment
- Approve schematic plans

## **1.2 CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE**

This document serves as the initial study (IS) and Mitigated Negative Declaration (MND) for the proposed Cal Poly San Luis Obispo Fermentation Sciences Institute Center Project, located in San Luis Obispo, California. This IS/MND has been prepared in accordance with CEQA (California Public Resources Code, Section 21000 et seq.), and Title 14 of the California Code of Regulations (hereafter “CEQA Guidelines”) (14 CCR 15000 et seq.).

A lead agency prepares an IS to determine whether a project may have a significant impact on the environment (14 CCR 15063(a)) and thereby confirm the appropriate environmental document to be prepared by the lead agency. This IS concludes the project would not result in any significant environmental impacts upon implementation of available and feasible mitigation measures that will be incorporated into the project design. An MND is therefore the appropriate environmental review document under CEQA. The lead agency, the Trustees, will be responsible for the review and approval of the proposed project.

### 1.3 PROJECT PLANNING SETTING

The proposed Fermentation Sciences Center would be a part of the College of Agriculture, Food & Environmental Sciences. The FSC is intended to provide education programming space including classroom/meeting hall, laboratories, faculty offices, and production areas for fermentation activities that support commercial grade preparation of wine, beer, and distilled alcohol.

The proposed project would consist of the construction of three new buildings for the Wine and Viticulture Department. Cal Poly's Wine and Viticulture Department uses an interdisciplinary curriculum focused on a holistic approach to the wine industry, including vineyard development, wine making, and wine business. Cal Poly intends to develop a similar interdisciplinary curriculum for craft beer and for small batch distilled liquor. A dedicated facility for the three main branches of fermentation science would allow for the consolidation of resources located around the campus to a centralized area, and encourage cross-pollination of ideas and research findings among students and faculty in this compact environment.

Current campus land use designation under the 2001 *Cal Poly Master Plan* is Outdoor Teaching and Learning. According to the Campus Land Use and Design Guidelines, the proposed project site is designated AG-II, Cropland, which allows for horticulture and crop sciences, including a winery. Development in this zone should take into consideration drainage impacts, specifically the prevention of pollutants from entering Stenner Creek (Cal Poly San Luis Obispo 2010).

Implementation of the proposed project would not result in an increase in full-time equivalent student population on the Cal Poly San Luis Obispo campus as it would involve the centralization and consolidation of existing on-campus wine, viticulture, and fermentation programming; resources; and faculty, students, and staff. No part of the project would allow for growth beyond what was approved for the university under the existing Campus Master Plan and Environmental Impact Report (Cal Poly San Luis Obispo 2001).

## 1.4 PUBLIC REVIEW PROCESS

This Initial Study/Mitigated Negative Declaration (IS/MND) has been submitted to the Office of Planning and Research (OPR) State Clearing House (SCH) for distribution to State Agencies that may have authority or responsibility pertaining to the project. The document review period established by the SCH also applies to members of the public that wish to submit comments on the completeness and accuracy of this IS/MND.

**PUBLIC INQUIRY:** Any person may comment on the findings herein. Information relating to the proposed project is on file in the Facilities Planning and Capital Projects Office, at the address shown below.

**PROJECT TITLE:** Cal Poly San Luis Obispo Fermentation Sciences Center Project

**PROPOSED NEGATIVE DECLARATION DATE:** March 22, 2017

**NEGATIVE DECLARATION REVIEW PERIOD ENDS:** April 22, 2017

**PROJECT APPLICANT CONTACT INFO:**

Julie Hawkins  
Facilities Planning & Capital Projects – Building 70  
California State Polytechnic University  
San Luis Obispo, CA 93407  
Phone: 805.756.6563  
E-mail: [jkhawkin@calpoly.edu](mailto:jkhawkin@calpoly.edu)

**DATE POSTED / DATE OF NOTICE TO PUBLIC:** March 22, 2017

## 2.0 SUMMARY OF FINDINGS

---

Cal Poly San Luis Obispo finds that the proposed Fermentation Sciences Center Project would not have a significant adverse effect on the environment. A mitigated negative declaration (MND) is therefore proposed to satisfy the requirements of CEQA pursuant to the CEQA Guidelines (14 CCR 15000 et seq.), and California Public Resources Code, Section 21000 et seq. This IS utilizes the most recent checklist set forth in Appendix G of the CEQA Guidelines to describe the effects that may result from the proposed project for each environmental topic area.

### 2.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

Based on the preliminary environmental evaluation provided in this IS, the Trustees have determined that the environmental factors checked below would be potentially affected by the development proposed and evaluated in the Fermentation Sciences Center Project, involving at least one impact that is a “Potentially Significant Impact,” or “Less than Significant With Mitigation Incorporated,” as indicated by the checklist on the following pages:

- |  |   |  |
|--|---|--|
| <input checked="" type="checkbox"/> Aesthetics                 | <input type="checkbox"/> Agriculture and Forestry Resources         | <input checked="" type="checkbox"/> Air Quality                        |
| <input checked="" type="checkbox"/> Biological Resources       | <input checked="" type="checkbox"/> Cultural Resources              | <input type="checkbox"/> Geology and Soils                             |
| <input type="checkbox"/> Greenhouse Gas Emissions              | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input checked="" type="checkbox"/> Hydrology and Water Quality        |
| <input type="checkbox"/> Land Use and Planning                 | <input type="checkbox"/> Mineral Resources                          | <input type="checkbox"/> Noise   |
| <input type="checkbox"/> Population and Housing                | <input type="checkbox"/> Public Services                            | <input type="checkbox"/> Recreation                                    |
| <input checked="" type="checkbox"/> Transportation and Traffic | <input type="checkbox"/> Utilities and Service Systems              | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

## 2.2 ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in Section 3 and summarized in Section 4 have been incorporated into the project. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
Julie Hawkins  
Facilities Planning and Capital Projects  
California State Polytechnic University, San Luis Obispo

March 17, 2017

Date

### 3.0 INITIAL STUDY CHECKLIST

The following IS checklist utilizes the most recent version of Appendix G of the CEQA Guidelines to describe the effects that may result from the Fermentation Sciences Center Project for each environmental topic area. The IS checklist provided below also includes a determination as to the potential significance of any impacts, based on evidence known at this time and provided in this document.

#### 3.1 AESTHETICS

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
Environmental Issues – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Discussion

- a. No scenic vistas are located within the proposed project area as identified in the *Cal Poly Master Plan and Environmental Impact Report* (Cal Poly San Luis Obispo 2001) or in the *Campus Land Use and Design Guidelines* (Cal Poly San Luis Obispo 2010). Additionally, the project site is not located within an area identified under the Campus Aesthetic Consistency Program as discussed in the *Campus Land Use and Design Guidelines* (Cal Poly San Luis Obispo 2009). As such, the project would not have a substantial adverse effect on a scenic vista. Impacts would be less than significant.
- b. Highway 1, located approximately 0.25 mile from the project site, is an officially designated State Scenic Highway by District 5 of the California Department of Transportation (Caltrans) (Caltrans 2012). The roadway segment along Highway 1 closest to the project site is designated as having a “high or moderate scenic value outside city limit” as defined in the *City of San Luis Obispo General Plan* (City of San Luis Obispo 2006). Although Highway 1 is designated as a State Scenic Highway, the proposed project site is not visible from



Highway 1 due to a hillside and an adjacent intervening orchard located in between the roadway and the project site. Impacts would be less than significant.

- c. The project site is located northeast of the central campus core in a publically visible area with views afforded primarily to motorists traveling along Mt. Bishop Road. Limited views would be afforded to motorists, cyclists and pedestrians travelling north on Highland Drive. The site and surrounding area is characterized by agriculturally dominant uses including flat, open fields utilized for crop production, sporadic buildings associated with agricultural educational uses, public and access roads, and equipment storage areas. The project site is bounded by the E-Surplus Building, Rose Float Lab site and associated surface parking lot to the north; the Crops Unit compound to the south; and active agricultural fields to the west and east. The proposed project would convert an undeveloped, active agricultural portion of campus to a fermentation sciences center consisting of three separate single story structures with a total square footage of approximately 42,000 gross square feet, which would alter the visual character of the site from undeveloped open space to a built urban site. Potential aesthetic impacts would occur on a temporary basis during the construction activities as a result of stockpiling, construction equipment, and personnel within the construction areas. Upon completion of construction, all temporary visual impacts due to construction activity would cease.

The completed fermentation sciences center would include three separate structures, and would therefore introduce structural development within the existing site viewshed for motorists travelling along Mt. Bishop Road. In addition, Mt. Bishop Road is part of the proposed/preferred alignment of a future County bicycle and pedestrian path referred to as the Chorro Valley Bike Trail, and thus cyclists and pedestrians could be more common along Mt. Bishop Road in the future. The proposed structures would be a single story in height, with a more steeply sloped central roof ridge and more gently sloped side wings, conveying a contemporary architectural interpretation of forms common in large agriculturally related facilities. In terms of overall building height, the Grange Hall would be 29 feet to the central roof ridge; for the winery and brewery buildings, the main ridge would reach 31.5 feet, with the central cupola element extending up to 36.5 feet. Neither the scale nor massing of the proposed structures would be dissimilar to the existing structures on the adjacent parcels to the south or north. Consequently, the developed site would be visually compatible with existing structural development in the immediate area. Additionally, views afforded to northbound Highland Drive travelers would be obstructed due to intervening mature trees, existing landscape, and the adjacent Crops Unit buildings. As such, limited views to motorists, cyclists and pedestrians would be available from northbound Highland Drive travelers.

Additionally, although the project would involve the construction of several buildings on undeveloped, agricultural land in production, the proposed project site is currently located adjacent to existing structures associated with the Crops Unit on campus. As such, the project would not introduce new development into a vicinity where development does not currently exist, and would not substantially alter the agricultural nature of the overall area's visual character. Moreover, the proposed project site is not located in a highly visible area on campus where the majority of existing viewers, including students, faculty, visitors, as well as primary academic activities are located. For these reasons, the project would not substantially degrade the existing visual character of the site or its surroundings. Impacts would be considered less than significant.

- d. Existing lighting sources on campus include structure lighting, campus security lighting, and street lighting. Potential increased sources of light and/or glare would involve operational lighting including exterior lighting associated with the proposed structure and reflective building components, such as windows that could produce glare. Mitigation is required in order to avoid potential lighting and glare impacts associated with the proposed structures. Refer to MM AES-1 (at the end of the aesthetics discussion).

Additionally, although the project would be located in an area outside of the central campus core where the majority of lighting sources are located, the proposed building would be located adjacent to existing structures where lighting is currently provided; as such, the proposal would not introduce a substantial new lighting or glare source such that day or nighttime views would be adversely affected. Impacts would be less than significant.

### **Mitigation Measures and Residual Impacts**

To ensure operational lighting impacts are reduced to a level that is less than significant, Mitigation Measure (MM) AES-1 is provided in accordance with the 2001 *Cal Poly Master Plan and Environmental Impact Report* (Cal Poly San Luis Obispo 2001):

#### **MM AES-1: Lighting and Glare**

All exterior lighting shall be hooded. No unobstructed beam of light shall be directed toward sensitive uses. The use of reflective materials in all structures shall be minimized (e.g., metal roofing, expanses of reflective glass on west-facing walls).

With incorporation of Mitigation Measure AES-1, which reflects mitigation as identified in the *Cal Poly Master Plan and Environmental Impact Report* (Cal Poly San Luis Obispo 2001), impacts are anticipated to be less than significant during project operation.

### 3.2 AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
Environmental Issues – Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Discussion

- a. The project site was surveyed on the 2008 California Department of Conservation Important Farmlands Map for San Luis Obispo County as Prime Farmland (CDC 2010). Additionally, active irrigated agricultural uses, which are currently employed for academic purposes including row crop and orchards, exist on the proposed project site. Therefore, construction of the proposed project would convert active farmland designated as Prime Farmland to non-active agricultural uses. Additionally, the 2001 *Cal Poly Master Plan and Environmental Impact Report* specifically states that prime agricultural soils are to be protected from future development (Cal Poly San Luis Obispo 2001). However, although farmland would be converted to non-active agricultural uses, existing agricultural uses on the project site are currently used for academic purposes, and the proposed project would introduce new agriculture-related instruction uses, namely fermentation processes applied to various agricultural produce crops. In addition, the existing orchard displaced by the proposed buildings would be replanted elsewhere on campus. Therefore, although the site would convert Prime Farmland to non-crop-based uses, the proposed uses for the site

would continue to support agricultural academic programming and associated agricultural uses. In addition, replanting of the orchard would result in no net loss of total orchard inventory on the campus. As such, the project would not convert Prime Farmland to non-agricultural uses, and impacts would be less than significant.

- b. The project site is not subject to a Williamson Act contract (CDC 2012). Therefore, no conflict with a Williamson Act contract would occur. Current campus land use for the proposed project site is AG-11 and designated Cropland, which allows for horticulture and crop sciences, including post-harvest production activities such as wine-making and other fermented beverage manufacturing. As the proposed project would continue to support agricultural academic uses, no conflict with existing agricultural land use would occur. No impact would occur.
- c. As mentioned above, the proposed project site is zoned AG-11 and designated Cropland, which allows for horticulture and crop sciences, including post-harvest production facilities including fermented beverages. The project site is designated “Outdoor Teaching and Learning” as delineated in the 2001 *Cal Poly Master Plan and Environmental Impact Report* (Cal Poly San Luis Obispo 2001). The project site supports an active fruit orchard among other row crops; however, no forest land, timberland, or Timberland Production areas (as defined in the Public Resources Codes 12220 (g), 4526, or 51104 (g)) are located within or adjacent to the project site. Therefore, the project would not conflict with existing land use for forest land, timberland, or Timberland Production areas, or result in the loss or conversion of forest lands to non-forest uses, as none exist. No impact would occur.
- d. As discussed above, the project site supports an active fruit orchard among other row crops as part of Cal Poly’s College of Agriculture programs; however, no forest land or timberland exists on the project site. As such, the proposed project would not result in the conversion of forest land to non-forest use. No impact would occur.
- e. See response (a) above.

### 3.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
Environmental Issues – Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Discussion

The project site is located within the South Central Coast Air Basin under the jurisdiction of the San Luis Obispo County Air Pollution Control District (SLOCAPCD). The SLOCAPCD is the local agency responsible for the administration and enforcement of air quality regulations for the area.

- a. Projects are considered consistent with, and would not conflict with or obstruct implementation of, the local Air Quality Management Plan if the growth in socioeconomic factors (e.g., population, employment, etc.) is consistent with the underlying regional plans used to develop the Air Quality Management Plan. Demographic growth forecasts for various socioeconomic categories, developed by the San Luis Obispo Council of Governments and local and regional agencies were used to estimate future emissions in the 2001 Clean Air Plan (SLOCAPCD 2001). The proposed project would maintain student population and employment levels that are consistent with the previously planned development of the project site and the growth projections anticipated in SLOCAPCD's 2001 Clean Air Plan. Additionally, the proposed project would not be considered a growth-inducing use or result in an increase in student enrollment, as the proposed project would

consolidate existing wine and viticulture academic uses on campus. Because the planned growth of Cal Poly San Luis Obispo has been factored into the underlying growth projections of the 2001 Clean Air Plan, and the project would not induce additional growth on campus, the proposed project would not result in a conflict with, or obstruct implementation of, the applicable air quality plan. Thus, this impact would be less than significant.

- b. Construction and operation of the proposed project may result in the emission of additional short- and long-term criteria air pollutants from mobile and/or stationary sources, which may exceed federal and state air quality standards or contribute to existing nonattainment of air quality standards. “Criteria pollutants” under the Clean Air Act are ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), particulate matter less than or equal to 10 microns in size (PM<sub>10</sub>), particulate matter less than or equal to 2.5 microns in size (PM<sub>2.5</sub>), and lead (Pb). An area is designated in attainment when it is in compliance with the National Ambient Air Quality Standards and/or the California Ambient Air Quality Standards. San Luis Obispo County is designated as attainment and/or unclassifiable of all federal standards with the exception of the 8-hour O<sub>3</sub> standard for the eastern portion of the County; the western portion of the County is designated as attainment for the federal 8-hour O<sub>3</sub> standard. The County is designated as nonattainment for the state 8-hour and 1-hour O<sub>3</sub> standards and the state PM<sub>10</sub> standards, but is designated as attainment for all other state criteria pollutant standards.

Construction of the proposed project would result in a temporary addition of pollutants to the local airshed caused by soil disturbance, dust emissions, and combustion pollutants from on-site construction equipment, as well as from employee vehicles and off-site trucks hauling construction materials. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Implementation of the proposed project would generate construction-related air pollutant emissions from three general activity categories: entrained dust, equipment and vehicle exhaust emissions, and architectural coatings. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM<sub>10</sub> and PM<sub>2.5</sub> emissions. Exhaust from internal combustion engines used by construction equipment and hauling (dump trucks) and vendor trucks (i.e., delivery trucks) and worker vehicles results in emissions of oxides of nitrogen (NO<sub>x</sub>), reactive organic gases (ROG) (also referred to as volatile organic compounds (VOCs)), CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. ROGs and NO<sub>x</sub> are important because they are precursors to O<sub>3</sub>. The application of architectural coatings, such as exterior/interior paint and other finishes, would also produce ROG emissions.

Maximum daily emissions of NO<sub>x</sub> is expected to occur during the grading and site demolition as a result of off-road equipment operation and on-road haul trucks. Fugitive

dust and off-road equipment emissions during grading and site demolition are expected to generate the maximum daily PM<sub>2.5</sub> emissions. Maximum daily PM<sub>10</sub> emissions are expected to occur during building construction and would primarily result from paved road dust generated by off-site haul trucks exporting waste to the closest landfill. The application of architectural coatings would produce the maximum daily ROG emissions.

In order to avoid emissions impacts during construction, mitigation is required. Refer to MM AIR-1, and MM AIR-2 (at the end of the air quality discussion).

Long-term operation of the proposed project would result in daily vehicular trips and energy consumption (e.g., heating and air conditioning), both of which would generate emissions. Operation of the project would produce ROG, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from area sources, including natural gas combustion and use of consumer products, and motor vehicle trips to and from project land uses. The proposed project would primarily impact air quality through vehicular traffic generated by on-campus students, off-campus students, faculty, and staff. Operation of the proposed project would produce minimal operational emissions resulting from motor vehicles, as the proposed project is not considered a trip-generating use. The project would centralize and consolidate existing wine, viticulture, and fermentation uses on campus, and would not result in an increase in student population.

The SLOCAPCD has adopted general screening criteria to determine the type and scope of projects requiring an air quality assessment, and/or mitigation. These criteria are based on project size in an urban setting and are designed to identify those projects with the potential to exceed the SLOCAPCD's significance thresholds. Operational impacts are focused primarily on indirect emissions (i.e., motor vehicles) associated with residential, commercial, and industrial development. The screening criteria is based on ozone precursor and greenhouse gas (GHG) emissions and is not comprehensive; therefore, it is used as general guidance in this Initial Study. A more refined analysis of potential air quality impacts specific to the proposed project would be necessary if it would exceed the screening criteria or is within 10% of exceeding the screening criteria.

Table 1-1, Operational Screening Criteria for Project Air Quality Analysis, of the SLOCAPCD *CEQA Air Quality Handbook* (SLOCAPCD 2012) indicates that the screening criteria for a 4-year university or college expected to exceed the SLOCAPCD daily ozone precursor significance threshold of 25 pounds of ROG plus NO<sub>x</sub> per day from operational impacts is 545 students.

The proposed project entails the addition of 42,000 square feet of academic space on campus that would provide for instruction and laboratory space for approximately 100 students and associated faculty and staff. Implementation of the proposed project, however, would not result in an increase in full-time equivalent student population on campus, as it would

involve the centralization and consolidation of existing on-campus wine, viticulture, and fermentation programming; resources; and faculty, students, and staff. As such, the proposed project is not expected to exceed the SLOCAPCD screening threshold of 545 students and would not require a project-specific air quality analysis.

Pursuant to the Scope and Content Screening Table, development of the proposed project would not likely result in significant pollutant emissions of ozone precursors. Regardless, Cal Poly San Luis Obispo's Campus Master Plan and EIR mitigation, and SLOCAPCD rules, regulations, and policies would be applied as applicable.

- c. The proposed development would not result in additional students or residents. A substantial increase in vehicle emissions is not anticipated as the proposed project would relocate and consolidate existing wine, viticulture and fermentation uses on campus into one facility on the proposed project site. Area source emissions associated with heating and air conditioning of the new center is anticipated to be minimal and the project would incorporate design features to further reduce the project's energy consumption. As the project would not result in a direct increase in vehicle trips or student enrollment or associated air pollutant emissions, the project is not anticipated to result in cumulatively considerable emissions of non-attainment criteria air pollutants.
- d. Sensitive receptors include but are not limited to residential land uses, schools, open space and parks, recreational facilities, hospitals, resident care facilities, day-care facilities, or other facilities that may house individuals with health conditions that would be affected by poor air quality. Although construction activities associated with the proposed project would result in temporary sources of fugitive dust and construction vehicle emissions, there are no off-site sensitive receptors located near the proposed development site on the Cal Poly San Luis Obispo campus that would be affected by the proposed development. The closest off-site sensitive receptors are private residences and a church located approximately 0.3 mile south of the site, west of California Boulevard. Additionally, the proposed project site is located outside of the central campus core in an agriculturally dominant portion of campus characterized by open agricultural fields, agriculture-related structures, equipment storage areas, and roads. Therefore, it is anticipated that emissions generated during construction or operation of the proposed project would not affect sensitive receptors. Impacts would be less than significant.
- e. Earthwork, construction, and demolition activities would also result in the emission of diesel fumes and other odors typically associated with construction activities. Any odors associated with construction and demolition activities would be temporary and would cease upon project completion. Impacts would be less than significant.



### **Mitigation Measures and Residual Impacts**

To ensure emissions generated during construction activities are reduced to a level that is less than significant, the following mitigation is provided in accordance with the 2001 *Cal Poly Master Plan and Environmental Impact Report* (Cal Poly San Luis Obispo 2001):

#### **MM AIR-1: Dust Control**

- Employ measures to avoid the creation of dust and air pollution. During construction, the amount of disturbed area shall be minimized
- Unpaved areas shall be wetted down, to eliminate dust formation, a minimum of twice a day to reduce particulate matter. When wind velocity exceeds 15 mph, site shall be watered down more frequently.
- Store all volatile liquids, including fuels or solvents in closed containers.
- No open burning of debris, lumber or other scrap will be permitted.
- Properly maintain equipment to reduce gaseous pollutant emissions.
- Exposed areas, new driveways and sidewalks shall be seeded, treated with soil binders, or paved as soon as possible. Exposed ground areas that are left exposed after project completion should be sown with a fast-germinating native grass seed and watered until vegetation is established.
- Cover stockpiles of soil, sand and other loose materials.
- On-site vehicle speeds should be restricted to 15 miles per hour or less. Cover trucks hauling soil, debris, sand or other loose materials.
- Sweep project area streets at least once daily.
- Appoint a dust control monitor to oversee and implement all measures listed in this Article.
- The Contractor shall maintain continuous control of dust resulting from construction operations. Particular care must be paid to door openings to prevent construction dust and debris from entering the adjacent areas.
- After clearing, grading, earth moving, or excavation is completed, the entire area of disturbed soil shall be treated immediately by watering or revegetating or spreading soil binders to minimize dust generation until the area is paved or otherwise developed so that dust generation will be minimized. Water down the project site, access routes, and lay down areas whenever dust generation becomes a nuisance.

- When wind conditions create considerable dust, such that a nuisance would generate complaints, the Contractor shall either suspend grading operations, and/or water the exposed areas.
- The campus reserves the right to request watering of the site whenever dust complaints are received.
- It shall be the university's sole discretion as to what constitutes a nuisance.

The following mitigation measure is provided in accordance with the 2001 *Cal Poly Master Plan and Environmental Impact Report* (Cal Poly San Luis Obispo 2001) to reduce NO<sub>x</sub>, ROG and diesel particulate matter emissions generated from on-site construction equipment:

#### **MM AIR-2: Equipment Emission Control<sup>1</sup>**

- The project shall require that all fossil-fueled equipment shall be properly maintained and tuned according to manufacturer's specifications.
- The project proponent shall require that all off-road and portable diesel-powered equipment including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, shall be fueled exclusively with CARB certified diesel fuel.
- Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State off-Road Regulation.
- Use Caterpillar pre-chamber, diesel-fired engines (or equivalent low NO<sub>x</sub> engine design) in heavy equipment used to construct the project to further reduce NO<sub>x</sub> emissions.
- Use on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation.
- Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NO<sub>x</sub> exempt area fleets) may be eligible by proving alternative compliance.
- All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5-minute idling limit.
- Electrify equipment when feasible.

---

<sup>1</sup> Equipment emission control measures have been modified from the original measures provided in the *Cal Poly Master Plan and Environmental Impact Report* (2001) to reflect current SLOCAPCD recommendations as provided in the SLOCAPCD *CEQA Air Quality Handbook* (SLOCAPCD 2012).

- Substitute gasoline-powered in place of diesel-powered equipment, where feasible.
- Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.

With incorporation of Mitigation Measures AIR-1 and AIR-2, which reflect mitigation as identified in the *Cal Poly Master Plan and Environmental Impact Report* (Cal Poly San Luis Obispo 2001) and *SLOCAPCD CEQA Air Quality Handbook* (SLOCAPCD 2012), construction-related emissions impacts are anticipated to be less than significant.

### 3.4 BIOLOGICAL RESOURCES

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
Environmental Issues – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Discussion

- a. The project site is located within an agriculturally dominant portion of the Cal Poly campus, northeast of the central campus core. The majority of the project would occur on a site that was previously graded and leveled for agricultural purposes. The project includes a small section of ungraded land that is located directly south and adjacent to the existing H1 parking lot.

Although the majority of the project site does not support native vegetation, seven coast live oak (*Quercus agrifolia*) trees are located within the project site near the northeast corner of the project area along Mt. Bishop Road (see Table 3.4-1 for statistics regarding the oak trees, and Figure 6 for locations). All oak trees are either located directly within the development envelope or their canopies are anticipated to extend onto or over a portion of the site. Figure 6 depicts the on-site oak trees in relation to the proposed site improvements. Direct impacts (through trimming, removal, or modification to the root system within the drip line) to coast live oak trees would occur as a result of project development. In order to avoid any potential impact to the oak trees, mitigation would be required. Refer to MM-BIO-1 (at the end of the biology discussion) which addresses these potential tree impacts.

**Table 3.4-1  
Individual Oak Tree Details**

Oak Tree Number	Approximate Height (feet)	Diameter at Breast Height (DBH, inches)				Combined DBH (inches)
		Branch 1	Branch 2	Branch 3	Branch 4	
Oak Tree 1	10	8.3	5.4	9.1	8.1	15.7
Oak Tree 2	8	9.5	13.4	14.2	-	21.7
Oak Tree 3	8	14.3	9.1	-	-	17.0
Oak Tree 4	12	9.2	11.3	-	-	14.6
Oak Tree 5	15	23.9	-	-	-	23.9
Oak Tree 6	10	3.1	2.1	8.9	-	9.7
Oak Tree 7	12	16.2	-	-	-	16.2

There are four sensitive natural communities located on the Cal Poly campus as listed in the *Campus Master Plan and Environmental Impact Report*: California native grassland, coastal and valley freshwater marsh, wet meadow/freshwater seep, and riparian open water and associated habitat (Cal Poly San Luis Obispo 2001). However, the project would not involve removal (habitat conversion, fill/dredge of wetlands, etc.) of any of these sensitive communities; therefore, impacts to these resources would not occur.

The site supports suitable habitat for the following special status wildlife: Cooper's hawk (*Accipiter cooperii*) and several species of bats including western mastiff bat (*Eumops perotis*), pallid bat (*Antrozous pallidus*), and Townsend's big-eared bat (*Corynorhinus townsendii*). Impacts to Cooper's hawk may occur as a result of disturbance to potential breeding and hunting habitat. In addition, the project would necessitate the removal of croplands, landscaping and/or ornamental vegetation. Birds may utilize the on-site and adjacent vegetation for nesting purposes during the breeding season, thereby creating a potentially significant impact. With the implementation of mitigation measures any potential impacts to Cooper's hawks or nesting birds, are reduced to less than significant. Refer to MM BIO-2 (at the end of the biology discussion) which addresses these potential impacts to nesting birds.

Potential roosting habitat for special-status bat species is adjacent to the project area, although the project site contains limited foraging habitat to attract bats to the area to roost. While the majority of the site contains unsuitable roosting habitat, there is a potential to impact special-status bat species known to roost in trees (western mastiff bat and pallid bat; Burt and Grossenheider 1980) and to indirectly impact species that roost in buildings (Townsend's big-eared bat; Burt and Grossenheider 1980). Trees and buildings where species may roost include the oak trees along Mt. Bishop Road and the Crop Units facilities. The orchard-agriculture land provides limited insect foraging opportunities on site, thus reducing the potential for bats to be attracted for roosting activities. Nonetheless, in order to avoid any potential impacts to bat roosting, mitigation would be required. Refer to MM BIO-3 (at the end of the biology discussion) which addresses these potential impacts to roosting bats.

The site is located within federally designated critical habitat for the California red-legged frog (*Rana draytonii*) (Unit SLO-3, 75 FR 12816-12959). Although the project site does not contain habitat to support this species, suitable habitat is located along Stenner Creek and the species is known to occur in Brizzolara Creek (CDFW 2017), which joins Stenner Creek approximately 0.4 miles south of the site.

Stenner Creek is located approximately 250 feet from the southwestern boundary and 540 feet from the northwestern boundary of the project site. A fence line runs along the boundary of Stenner Creek and a well utilized gravel road exists between this riparian area and the project site. However, since Stenner Creek is at a slightly lower elevation than the project site, there is a potential for impacts to the riparian area to occur during periods of heavy rain, in which case impacts to the riparian creek would be significant and require mitigation.

Although impacts to Stenner Creek are not expected, California red-legged frogs are known to disperse from breeding to upland habitat when conditions are wet (e.g.,

rainfall) to forage and seek refuge under logs, rocks, and other debris (Thomson et al. 2016; USFWS 2002). In order to avoid any potential impacts to Stenner Creek or California red-legged frogs, mitigation would be required. Refer to MM BIO-4 and MM BIO-5 (at the end of the biology discussion) which addresses these potential impacts to red-legged frogs and Stenner Creek habitat.

- b. As indicated in (a) above, sensitive natural communities or riparian resources are not located on site. Therefore, impacts to sensitive natural communities or riparian resources regulated by applicable state, federal, or local plans or policies, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS), would not occur. The Stenner Creek riparian area, which is dominated by sycamore (*Platanus racemosa*) and coast live oak, is located approximately 250 feet from the southwestern boundary and 540 feet from the northwestern boundary of the project site. A fence line runs along the boundary of the riparian area and a well utilized gravel road exists between the riparian area and the project site.

However, since Stenner Creek is at a slightly lower elevation than the project site, there is a potential for impacts to the riparian area to occur during periods of heavy rain in which case impacts to the riparian creek would be significant and require mitigation. To ensure impacts to Stenner Creek are reduced to a level that is less than significant, Mitigation Measure BIO-4 is provided (at the end of the biology discussion).

- c. The proposed project site does not contain a federally protected wetland; therefore, impacts would not occur.
- d. The project would not impact the Stenner Creek corridor which is a designated riparian corridor. The project site currently does not serve as a corridor because it is completely enclosed by an approximately 10-foot high chain-link fence and thus would not impact native resident or migratory wildlife.

The Cal Poly campus is located along the Pacific Flyway, an important migratory route for many birds traveling between North and South America. Riparian areas, freshwater marshes, and other wetland areas are particularly important areas to migratory birds of the Pacific Flyway. Since the project site is located within agricultural lands and it would not impact the adjacent riparian area, the project would not impact the important areas for avian species moving along the Pacific Flyway.

- e-f: There are no adopted habitat conservation plans (HCPs); natural community conservation plans (NCCPs); or other local, regional, or state HCPs applicable to the project. Therefore, the proposed project would not conflict with an HCP, NCCP, or other federal, state, or local plan. Additionally, the project would not conflict with any local policies or ordinances protecting biological resources. No impact would occur.

**Mitigation Measures and Residual Impacts**

To ensure impacts to oak trees are reduced to a level that is less than significant, Mitigation Measure (MM) BIO-1 is required.

**MM BIO-1: Certified Arborist Assessment**

Prior to construction activities, a certified arborist shall review the proposed construction plans, visit the project site, and assess the condition, health, and structure of the oak trees. The certified arborist shall provide a letter documenting the results of the survey, which shall include recommendations for oak tree protection during construction, any limitations for oak tree pruning, and an assessment to determine if the proposed project could significantly impact any of the oak trees. Any oak tree requiring removal due to significant impact by the project shall be replaced on a 1:1 basis with a minimum 24-inch box specimen.

With incorporation of MM BIO-1, potential oak tree impacts are anticipated to be less than significant during project construction and operation.

To ensure impacts to nesting birds are reduced to a level that is less than significant, Mitigation Measure BIO-2 is required.

**MM BIO-2: Pre-Construction Nesting Bird Survey.**

If construction will occur during the breeding season (generally February 1 – August 31), conduct pre-construction nesting bird surveys. A nesting bird survey shall be conducted by a qualified biologist to determine the presence of nests or nesting birds within 100 feet (300 feet for raptors) of the construction activities. The nesting bird surveys shall be completed no more than 72 hours prior to the start of any construction activities. If an active nest is identified adjacent to grading or site disturbance, the nest shall receive a buffer of 100-feet (which may be reduced if deemed appropriate by a professional consulting biologist with expertise with the involved bird species) where no construction activity or personnel are allowed. Fencing shall be installed to delineate the nest buffer. The nest shall be monitored every other week by a qualified biologist until fledglings become independent of the nest.

The monitoring biologist shall halt construction activities if he or she determines that the construction activities are disturbing the nesting activities. The monitor shall make practicable recommendations to reduce the noise or disturbance near the nest. This may include (1) turning off vehicle engines and other equipment whenever possible to reduce noise, (2) working in other areas until the young have fledged, or (3) placing noise barriers to maintain the noise at the nest to 60 dBA  $L_{eq}$  hourly or less or to the preconstruction ambient noise level if that exceeds 60 dBA  $L_{eq}$  hourly. The monitoring biologist will review

and verify compliance with these nesting boundaries and will verify that the nesting efforts have finished. Unrestricted construction activities can resume when no other active nests are found.

With incorporation of MM BIO-2, nesting bird impacts are anticipated to be less than significant during project construction.

To ensure impacts to roosting bats are reduced to a level that is less than significant, Mitigation Measure BIO-3 is required.

#### **MM BIO-3: Bat Protection Measures.**

Prior to work being conducted, the monitoring biologist will conduct a survey within 100 feet of the project site during the breeding/pupping season (April–mid-September). In general, bat species may roost in rock outcrop, dense tree canopies, flaking tree bark, snags, bridges, mine, caves, flumes, and buildings. If any known sites for bats in general are present within the survey area they shall be surveyed.

Inspections of known roosts shall be conducted using an appropriate combination of visual and acoustic survey techniques (including structure inspection, sampling, and/or exit counts) for areas that may be directly or indirectly impacted by the project. Bats shall be identified to the most specific taxonomic level possible. Where active bat roosts are located, reporting shall include: 1) the exact location of all roosting sites (location shall be adequately described and drawn on a map); 2) the number of bats present at the time of visit (count or estimate); 3) each species of bat present shall be named (include how the specific was identified); 4) the location, amount, distribution, and age of all bat droppings shall be described and pinpointed on a map; and 5) the type of roost (i.e., night roost – rest at night while out feeding vs. day roost – maternity colony) must also be clearly stated. All survey results, including field data sheets, shall be provided to the California Department of Fish and Wildlife (CDFW). Locations of all roosts shall be kept confidential to protect them from disturbance. If potential roosts are determined to be present then the roosts must be analyzed further to determine the species present and if maternity roosts are present. If maternity roosts of any bat species are present, the CDFW will be notified and no work will occur within 100 feet of the roost location of any bat species until the end of the pupping. For the protection of young (i.e., unable to fly) and hibernating adults, all project-related activities shall be avoided where roosts are present during the winter and spring. No restrictions apply to project vehicle traffic or to construction activity that occurs outside of the pupping season.

With incorporation of MM BIO-3, roosting bat impacts are anticipated to be less than significant during project construction.



To ensure impacts to Stenner Creek and California red-legged frogs are reduced to a level that is less than significant, Mitigation Measure BIO-4, BIO-5, BIO-6 and HYD-1 (as described in Section 3.9) are required.

**MM BIO-4: Best Management Practices (BMPs).**

Prior to the start of construction, BMPs (e.g., straw wattles and silt fencing) shall be established to minimize and/or eliminate sediment and chemical flow into Stenner Creek. BMPs shall be installed within natural substrate along the entire length of the western and southern boundaries of the project site. BMPs shall be placed to intercept runoff.

For example, bio-degradable erosion control materials (e.g., rice straw) with wooden posts driven through the fiber roll and into the soil 12-inches into the soil would be an acceptable non-lethal BMP. Fencing may consist of 24-inch to 30-inch tall bio-degradable filter fabric attached to wooden posts driven 12-inches into the soil.

During project activities, all trash that may attract predators will be properly contained, removed from the work site and disposed of regularly. Following construction, all trash and construction debris will be removed from all work areas.

All fueling and maintenance of vehicles and other equipment and staging areas will occur at least 60 feet from any riparian habitat or water body.

**MM BIO-5: California Red-legged Frog Measures.**

To avoid the potential for take of California red-legged frog that may disperse through the Project site, all initial ground disturbing activities shall be completed in the dry season (between June 1st and September 31st), unless a survey meeting the requirements of the USFWS for California red-legged frog has been conducted, with the final survey effort completed not sooner than 48 hours prior to the commencement of construction activities, which concludes no red-legged frogs are present. Initial grading activities shall also not occur after the first fall rains and before May of any year, unless the red-legged frog survey described immediately above has first been conducted and an absence of red-legged frogs has been determined.

**MM BIO-6: Contractor Training**

Prior to initiation of construction and demolition activities, the biological monitor shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the special-status species potentially present in the area, jurisdictional habitats present proximate to the project site, California red-legged frog and its habitat, the specific measures that are being implemented to protect special-status species, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

With incorporation of MM BIO-4, BIO-5, BIO-6 and HYD-1, impacts to red-legged frogs and Stenner Creek habitat are anticipated to be less than significant during project construction and operation.

### 3.5 CULTURAL RESOURCES

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
Environmental Issues – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Discussion

- a. The proposed project currently supports an active orchard and row crops as part of the Cal Poly College of Agriculture academic programs. No historic-period structures or historic resources including prehistoric or historic archaeological sites exist on site. Additionally, the *Cal Poly Master Plan and Environmental Impact Report* does not identify any historic resources on the project site as shown on Exhibit 6.5 (Cal Poly San Luis Obispo 2001). An intensive Phase I archaeological survey was conducted by Dudek on June 27, 2013, and no potentially significant prehistoric or historic archaeological sites that may be considered “historic resources” under CEQA Guidelines Section 15064.5 were identified on the project site. As the project site does not contain any potential significant archaeological sites or historic-era structures, no impact on historical resources as defined in CEQA Guidelines Section 15064.5 would occur. To address the extremely unlikely event that unknown, potentially significant cultural materials are encountered during construction, mitigation MM-CR-1 is required in accordance with standard practice. Impacts on cultural resources are considered less than significant with mitigation incorporated.

- b. The Phase I archaeological survey included a records search at the Central Coast Information Center (CCIC) located at the University of California, Santa Barbara. The search consisted of a review of all archaeological sites and investigations completed within 0.5 mile of the project site. The CCIC records indicate that 35 prior investigations have been undertaken within 0.5 mile of the project site, and a total of 11 sites are recorded in the vicinity. The prehistoric sites are characterized as small temporary camps or limited activity areas located in the vicinity of perennial water sources. No prehistoric or historic archaeological resources were identified within or adjacent to the proposed project site. The ground surface visibility experienced during the survey was very good, such that the negative results are considered very reliable. The potential for unknown, buried archaeological deposits within the proposed development area is considered low, in that agricultural activities have involved continuous tilling of site soils, such that buried resources would have been redeposited to the surface, if present. Given the absence of prehistoric or historic archaeological resources on the ground surface and reliable survey results, the impact on these resources is considered less than significant. To address the extremely unlikely event that unknown, potentially significant cultural materials are encountered during construction, mitigation MM-CR-1 is required in accordance with standard practice.
- c. No known paleontological resources exist on or near the project site. Therefore, no impact on paleontological resources would occur.
- d. The intensive Phase I archaeological survey of the project site did not identify any prehistoric resources, and the potential for unknown buried archaeological resources is considered low. The potential for unknown prehistoric human remains within the project site is therefore also very low. To address the extremely unlikely event that unknown, prehistoric remains are encountered during construction, mitigation MM-CR-1 is required in accordance with standard practice. Impacts to cultural resources due to potential disturbance of previously unidentified human remains are considered less than significant with mitigation incorporated.

#### **Mitigation Measures and Residual Impacts**

The potential for unknown prehistoric and historic cultural resources to exist below the Fermentation Sciences Center Project site is considered extremely unlikely. Therefore, potential project impacts on unknown cultural resources within the Project site are considered less than significant. However, as a standard practice, the following measure is applicable to address the extremely unlikely event that unknown, potentially significant cultural materials are encountered during construction of the proposed Project.

**MM CR 1 Cultural Materials Requirements**

- In the event unknown archaeological resources are exposed or unearthed during project construction, all earth disturbing work within the vicinity of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find. If the archaeologist determines that the resource is an “historic resource” or “unique archaeological resource” as defined by California Environmental Quality Act Guidelines Section 15064.5 and avoidance is not feasible, further evaluation by the archaeologist shall occur. The archaeologist’s recommendations for further evaluation may include a Phase II testing and evaluation program to assess the significance of the site. Resources found not to be significant will not require mitigation. Impacts to sites found to be significant shall be mitigated through implementation of a Phase III data recovery program. After the find has been appropriately mitigated, work in the area may resume. A Chumash representative shall monitor any mitigation work associated with prehistoric cultural material. With incorporation of the above recommended mitigation measure, the proposed Project’s residual impact on unknown prehistoric or historic archaeological resources would be less than significant.

**3.6 GEOLOGY AND SOILS**

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
Environmental Issues – Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion**

- a. The project site is located within a seismically active area of central Southern California, an area where several faults and fault zones are considered active by the California Division of Mines and Geology.
  - i. The project site is not identified on any Alquist-Priolo Earthquake Fault Zone maps (CDC 2013); however, the Los Osos Fault, located approximately 2.9 miles from the project site, is identified under the Alquist-Priolo Earthquake Fault Zone Act and having been active within the most recent 11,000 year period (City of San Luis Obispo 2012, CDC 2013). Additionally, San Luis Obispo County is listed as an affected County by earthquake fault zones as of August 16, 2007, under the California Department of Conservation (CDC) California Geological Survey Special Publication 42 (California Geological Survey 2007). Moreover, the project site is situated within close proximity to several other faults in the area including the San Andreas, Nacimiento, Rinconada, Cambria, West Huasna/Oceanic, and Edna faults among smaller, local faults (Cal Poly San Luis Obispo 2001). Due to the presence of faults within proximity to the project area and the questionable activity level of these faults, the potential for ground rupture to occur on the project site resulting in damage from surface rupture or fault displacement would be a potentially significant impact. All new building design projects shall be consistent with the California Building Code and the CSU Seismic Policy, which mandates, in part, that all new structures must provide an acceptable level of earthquake safety for students, employees, and the public who occupy these buildings and facilities, to the extent feasible (CSU 2011). With mandatory incorporation of these design standards, impacts would be less than significant.

- ii. Due to the proposed project site’s proximity to known faults, seismic ground shaking (i.e., ground acceleration) could adversely affect the proposed development. However, the proposed project would not be subject to seismic ground shaking to any greater degree than existing surrounding development. Additionally, all new building design projects are mandated to be consistent with the California Building Code and the CSU Seismic Policy. With mandatory incorporation of these design standards, impacts would be less than significant.
  - iii. Liquefaction occurs when ground shaking causes wet granular soils to change from a solid state to a liquid state resulting in the loss of foundational support for improvements located thereon, including the potential collapse of buildings. Buildings (and building occupants) are at risk when the ground begins to liquefy and can no longer support structures. The proposed project site, and Cal Poly campus as a whole, may be susceptible to impacts related to liquefaction; however, as with all new buildings constructed on campus, the proposed structures would be subject to, and would be required to comply with, the California Building Code (CBC). The CBC dictates that soil investigation be performed, and appropriate foundation support features incorporated which would ensure structural integrity of the proposed project would not be compromised due to the presence of liquefaction potential. Final foundation engineering for the building would consider liquefaction potential and appropriate engineering methods to address liquefaction. Therefore, impacts would be less than significant.
  - iv. According to the *Cal Poly Master Plan and Environmental Impact Report*, Exhibit 6.3, the proposed project site is not located within an area with identified potential landslide hazard (Cal Poly San Luis Obispo 2001). Therefore, landslide impacts would not affect the proposed project.
- b. Construction activities associated with the proposed project, including grading, would temporarily expose underlying soils, thereby increasing the potential to cause soil erosion or the loss of topsoil. The effects of erosion are intensified with an increase in slope (as water moves faster, it gains momentum to carry more debris) and the narrowing of runoff channels (which increases the velocity of water); however, the proposed project site is located on a relatively flat portion of campus, and erosion during construction is unlikely. Upon completion of the project, structures, roadways, and landscaping or revegetated areas would eventually cover any soils exposed during construction; thus, no long-term new erodible soils would be created as a result of the proposed project.

Additionally, during construction, the project would be required to implement erosion control measures stipulated in a stormwater pollution prevention plan (SWPPP) which is mandated pursuant to the National Pollutant Discharge Elimination System stormwater

permit requirements. Therefore, during construction and over the life of the project, erosion control measures and pollutant discharges would be reduced to levels that are less than significant.

- c. The proposed project site would not be impacted by, or cause an increase in, landslide potential, as described in (a) above. The project site may have the potential for liquefaction to occur (as discussed in (a) above), which would be addressed by the CBC, which mandated soils investigation and incorporation of foundation design features to prevent damage or collapse to the proposed structures from liquefaction potential. The project site and Cal Poly campus as a whole, may be susceptible to impacts related to lateral spreading, subsidence, or collapse of loose earth materials; however, as with all new buildings constructed on campus, the proposed structures would be subject to, and would be required to comply with, the CBC which would ensure structural integrity of the proposed project would not be compromised due to lateral spreading, subsidence, or collapse of earth materials. Final foundation engineering for the buildings would consider on-site geotechnical conditions in the final engineering and site improvements design. Therefore, impacts would be less than significant.
- d. The proposed project site, and Cal Poly campus as a whole, may be susceptible to impacts related to expansive soils; however, as with all new buildings constructed on campus, the proposed structures would be subject to, and would be required to comply with, the CBC which would ensure structural integrity of the proposed project would not be compromised due to expansive soils. Final foundation engineering for the building would consider on-site geotechnical conditions in final engineering and project design, including the potential for expansive soils. Therefore, impacts would be less than significant.
- e. Septic tanks or alternative wastewater disposal systems are not proposed. Therefore no wastewater disposal system impacts would occur.

### 3.7 GREENHOUSE GAS EMISSIONS

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
Environmental Issues – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Discussion

- a. Greenhouse gas (GHG) emissions would be generated from construction, demolition, and operation of the proposed project. Construction and demolition activities would result in GHG emissions from heavy construction equipment, truck traffic, and worker trips to and from the project site. Operation of the proposed project would generate GHG emissions associated with new buildings (natural gas, purchased electricity), and water consumption. A substantial increase in vehicle emissions is not anticipated as the proposed project would relocate and consolidate existing wine, viticulture and fermentation academic uses on campus into one facility on the proposed project site; therefore, the project would not result in a direct increase in vehicle trips or student enrollment.

As discussed in Section 3.3, Air Quality, the SLOCAPCD has adopted general screening criteria to determine the type and scope of projects requiring an air quality and GHG assessment. The screening criteria are based on the APCD's bright line threshold for annual GHG emissions in units of metric tons of carbon dioxide equivalent (MT CO<sub>2</sub>E) per year. Table 1-1, Operational Screening Criteria for Project Air Quality Analysis, of the SLOCAPCD *CEQA Air Quality Handbook* (SLOCAPCD 2012) indicates that the screening criteria for a 4-year university or college expected to exceed the SLOCAPCD annual GHG bright line threshold of 1,150 MT CO<sub>2</sub>E per year from operational and amortized construction impacts is 468 students.

As the project would not result in an increase in full-time equivalent student population on the Cal Poly San Luis Obispo campus, it would not exceed the SLOCAPCD's screening criteria for a university, and therefore a project-specific air quality and GHG assessment would not be required. Although the project would not result in an increase in students on campus, it would generate GHG emissions during construction of the 42,000-square-foot



of new structures. SLOCAPCD guidance indicates that the short-term GHG emissions from the construction phase should be amortized over the life of the project, which is 50 years for residential projects and 25 years for commercial projects. Project-generated construction GHG emissions are anticipated to be negligible when amortized over 25 years. The project's preliminary transportation study assumed that the university could offer an increase in the number of classes as a result of the project; however, this increase in classes may be offset by shifting of existing wine and viticulture related trips from the campus core (where wine and viticulture staff and classes are currently located) to the project site.

Development of the proposed project would likely not generate significant GHG emissions that would result in a cumulatively considerable contribution to climate change impacts, and a detailed analysis would not be required as the project is not expected to exceed the SLOCAPCD annual GHG bright line threshold screening criteria. Regardless, Cal Poly San Luis Obispo's Campus Master Plan and EIR mitigation, and SLOCAPCD rules, regulations, and policies would be followed, as applicable. In order to ensure avoidance of potentially significant GHG emission impacts, the project would be required to incorporate design features that would reduce emissions from area sources (e.g., energy use) and reduce emissions from vehicles. Impacts would be less than significant with mitigation.

- b. The proposed project would not be subject to the City of San Luis Obispo Climate Action Plan or any other municipal policy related to the reduction of greenhouse gas emissions. Therefore, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. No impact would occur.

### **Mitigation Measures and Residual Impacts**

To ensure operational GHG emissions remain at a level that is less than significant, the following mitigation is provided in accordance with the 2001 *Cal Poly Master Plan and Environmental Impact Report* (Cal Poly San Luis Obispo 2001):

#### **MM GHG-1: Design Features to Reduce Energy Consumption / GHG Emissions**

Final design for the proposed Fermentation Sciences Center shall incorporate the following:

- Shade tree planting along the southern exposure of buildings
- Building orientation to take advantage of natural light and heating and cooling.

With incorporation of Mitigation Measure GHG-1, which reflects mitigation as identified in the *Cal Poly Master Plan and Environmental Impact Report* (Cal Poly San Luis Obispo 2001), impacts are anticipated to be less than significant during project operation.

### 3.8 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
Environmental Issues – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Discussion

- a. A-C: The Cal Poly San Luis Obispo Environmental Health and Safety Department oversees health and safety procedures and programs on campus, including facility construction and operations. The Environmental Health and Safety Department develops and implements programs to ensure the safe use, handling, and storage of hazardous materials, and appropriate and compliant disposal of hazardous wastes. The Department

oversees and implements employee training programs, procedures and policies, and compliance surveys to satisfy these objectives.

Relatively small amounts of commonly used hazardous substances, such as gasoline, diesel fuel, lubricating oil, grease, cleaning products, landscaping chemicals and fertilizers, and solvents, would be used on site for construction and maintenance. These materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. No acutely hazardous materials would be used on site during project construction. Construction activities at the project site could result in the accidental release of hazardous materials to the environment and release of materials within 0.5 miles of an existing school (Latter Day Saints Institute, California Boulevard). As such, mitigation would be required. The implementation of HAZ-1 (Risk Management Plan), listed below, would minimize the potential for construction-related impacts resulting from the storage of hazardous materials or upset to less than significant

Operation of the proposed project would involve the regular storage, use, and disposal of potentially hazardous materials associated with the fermentation sciences academic programs housed within the proposed facility. The types and amounts of such materials is not known at this time; however, mitigation would be provided which would include the disclosure of all hazardous and potentially hazardous materials expected to be stored and used on site. Additionally, the campus maintains a Hazardous Materials Management and Response Plan that addresses the handling of and risks associated with hazardous materials. The Master Plan does not propose storage or use of new hazardous materials that would not be addressed by the existing Management Plan (Cal Poly San Luis Obispo 2001). Therefore, hazardous materials handling and storage impacts would be considered less than significant.

Moreover, the proposed project, in the context of the overall campus, would be governed by the Cal Poly San Luis Obispo Campus Emergency Management Plan. The Campus Emergency Management Plan is designed to coordinate the use of university and community resources to protect life and campus facilities immediately following a major disaster, including the unexpected release of hazardous materials (Cal Poly San Luis Obispo 2013). Hazardous materials impacts are expected to be less than significant with mitigation incorporated.

- d. There are no known hazards on the proposed project site (Neel, pers. comm. 2013); therefore, no impact would occur.
- e-f. The proposed project site is not located within an airport land use plan, and is not located within 2 miles of a public or private airstrip. The closest airport is the San Luis Obispo County Regional Airport, located approximately 4.2 miles from the project site. Therefore, hazards associated with airports would be less than significant.

- g. Construction and operation of the proposed project would be subject to State Fire Marshall inspection and approval prior to building occupancy, which would ensure appropriate emergency access is provided to/from the facility. Additionally, as stated in the *Cal Poly Master Plan and Environmental Impact Report*, “campus services and facilities must be designed to meet or exceed applicable legal guidelines such as access for those with physical or learning disabilities, fire safety, and emergency response systems” (Cal Poly San Luis Obispo 2001). Moreover, the proposed project, in the context of the overall campus, would be governed by the Cal Poly San Luis Obispo Campus Emergency Management Plan, which includes action response protocols in the event of a number of major disasters. Therefore, impacts would be less than significant.
- h. The project site is located adjacent to open agricultural fields, natural vegetation, and grasslands that constitute a moderate fire hazard. The proposed project would comply with the local fire code and as stated in response g) above, and State Fire Marshal inspection and approval would ensure adequate emergency access is provided under proposed project design. Moreover, the proposed project, in the context of the overall campus, would be governed by the Cal Poly San Luis Obispo Campus Emergency Management Plan, which includes action response protocols in the event of a major fire. Therefore, while the potential for wildland fires exists, impacts related to wildland fire hazards would be less than significant.

**Mitigation and Residual Impact:**

The following Risk Management Plan (RMP) standard required by the California Accidental Release Prevention (CalARP) Program (HSC, Chapter 6.95) would reduce the project’s impacts regarding hazardous materials and/or risk of upset to a **less than significant** level:

**MM HAZ-1 Preparation of a Hazardous Material Risk Management Plan**

Prior to construction, the Contractor shall prepare a Hazardous Material Risk Management Plan to minimize the potential for, and effects of, spills of hazardous or toxic substances during construction of the project. The plan shall be submitted for review and approval by the Cal Poly San Luis Obispo Environmental Health and Safety Department, and shall include, at minimum, the following:

1. A description of storage procedures and construction site maintenance and upkeep practices;
2. Identification of a person or persons responsible for monitoring implementation of the plan and spill response;

3. Identification of Best Management Practices (BMPs) to be implemented to ensure minimal impacts to the environment occur, including but not limited to the use of containment devices for hazardous materials, training of construction staff regarding safety practices to reduce the chance for spills or accidents, and use of non-toxic substances where feasible;
4. A description of proper procedures for containing, diverting, isolating, and cleaning up spills, hazardous substances, and/or soils, in a manner that minimizes impacts on surface and groundwater quality and sensitive biological resources;
5. A description of the actions required if a spill occurs, including which authorities to contact and proper clean-up procedures; and
6. A requirement that all construction personnel participate in an awareness training program conducted by qualified personnel approved by the Cal Poly San Luis Obispo Environmental Health and Safety Department. The training must include a description of the Hazardous Materials Spill Prevention, Control, and Countermeasure Plan, the plan’s requirements for spill prevention, information regarding the importance of preventing spills, the appropriate measures to take should a spill occur, and identification of the location of all clean-up materials and equipment.

With the incorporation of these measures, residual impacts associated with hazardous materials/risk of upset would be **less than significant**.

### 3.9 HYDROLOGY AND WATER QUALITY

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
Environmental Issues – Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be 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 which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 3.0 – Initial Study Checklist

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
c) Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) 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 which would result in flooding on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

- a. The proposed project would be located on an undeveloped, active agricultural site, which is currently irrigated to support orchards and row crops. Current campus land use for the proposed project site is AG-II and designated Cropland, which allows for horticulture and crop sciences, including instructional space such as the proposed Fermentation Sciences Center. According to the Campus Land Use and Design Guidelines, development in this zone should take into consideration drainage impacts, specifically the prevention of pollutants from entering Stenner Creek (Cal Poly San Luis Obispo 2010). The Stenner Creek riparian area is located approximately approximately 250 feet from the southwestern boundary and 540 feet from the northwestern boundary of the project site. A fence line runs along the boundary of the riparian area and a paved road is located between the riparian area and the project site. Due to intervening buffer elements including the fence and the roadway, impacts to Stenner Creek are not likely. However, to

protect surface and groundwater resources, and biological and archeological resources from water-related impacts, Cal Poly has developed a Water Quality Management Plan and a Storm Water Pollution Prevention Program for development on campus (Cal Poly San Luis Obispo 2005). The Water Quality Management Plan outlines best management practices (BMPs) for construction and operation.

During construction and demolition activities, gasoline, diesel fuel, lubricating oils, grease, and solvents could be used on the project site. Accidental spills of these materials during construction activities could result in potentially significant water quality impacts. In addition, soils loosened during excavation and grading could degrade water quality if mobilized and transported off site via water flow. As construction and demolition activities may occur during the rainy season or during a storm event, construction of the proposed project could result in adverse impacts to water quality. Because the project site would be greater than 1 acre, incorporation of an SWPPP and implementation of appropriate BMPs would be required during project construction as part of the project's General Construction Activity Stormwater Permit issued by the Regional Water Quality Control Board. The SWPPP identifies which structural and nonstructural BMPs will be implemented, such as sandbag barriers, temporary desilting basins near inlets, gravel driveways, dust controls, and construction worker training. Additionally, in order to ensure avoidance of surface water quality impacts during construction, MM HYD-1 will be required (located at the end of the hydrology discussion).

Once operational, the primary source of pollutants would be impervious areas such as any pavement and any chemicals used for landscaping. Compliance with measures provided in the University Water Quality Management Plan would reduce impacts to water quality during operation.

- b. The proposed project would be located on an undeveloped, active agricultural site, which is currently irrigated to support orchards and row crops. Agricultural operations on site may include the historic use of pesticides or chemicals for crop production, which may have had the potential to affect groundwater quality. Additionally, the proposed project would result in the introduction of impervious surface area to a currently undeveloped site, reducing the potential for groundwater recharge; however, the proposed project footprint would not be substantial such that groundwater recharge would not occur, and surrounding agricultural fields would provide sufficient pervious surface area to maintain existing groundwater table levels during area precipitation. Dewatering or reduction of the groundwater table is not anticipated as a result of proposed project implementation. Impacts would be less than significant.
- c. The proposed project site is located adjacent to Stenner Creek. The proposed project would occur within the project limits as depicted on Figure 3, and would not alter the drainage of a surface water body, including Stenner Creek; however, the project site is currently

undeveloped and used for agricultural operations. Because the project would construct a new facility on undeveloped land on campus, on-site drainage would be altered which may result in erosion or siltation resulting in potentially significant impacts. Mitigation Measure HYD-1 is provided in accordance with the *Cal Poly Master Plan and Environmental Impact Report* to reduce impact resulting from erosion or siltation. Impacts would be less than significant with mitigation incorporated.

- d. The proposed project would result in the introduction of impervious surface area to a currently undeveloped site, which would increase on-site runoff volumes. Proposed project design would include appropriate drainage facilities to ensure off-site drainage is not significantly impacted. Additionally, implementation of Mitigation Measure HYD-1 would reduce impacts to a less-than-significant level.
- e. No existing drainage facilities currently exist on site, except those supporting on-site agricultural operations. As stated previously, the proposed project design would include appropriate stormwater drainage facilities sufficient to accommodate anticipated storm events and convey on-site flows. As such, impacts would be less than significant.
- f. See responses (a) through (e) above. Impacts would be considered less than significant with mitigation incorporated.
- g. The project site is not located within a Federal Emergency Management Agency (FEMA)-designated 100-year flood hazard area or any other flood hazard zone as mapped in the *Cal Poly Master Plan and Environmental Impact Report* Exhibit 6.4, Floodplain (Cal Poly San Luis Obispo 2001). Two floodplains in Exhibit 6.4 are depicted as occurring west and east of the project site. The proposed project does not include a residential component or student housing that would place residents within a FEMA flood hazard zone. Impacts would not occur.
- h. The project site is not located within a FEMA-designated 100-year flood hazard area or any other flood hazard zone as mapped in the *Cal Poly Master Plan and Environmental Impact Report* Exhibit 6.4, Floodplain (Cal Poly San Luis Obispo 2001). Two floodplains in Exhibit 6.4 are depicted as occurring west and east of the project site. As stated previously, the proposed project design would include appropriate stormwater drainage facilities sufficient to accommodate anticipated storm events and convey on-site flows; therefore, impacts related to flooding would be less than significant.
- i. No levees or dams are located within the proposed project vicinity. The closest dam to the project site is the Lopez Dam located approximately 13 miles from the site. The Cal Poly campus, including the proposed project site, is located outside of the dam inundation area, or Area of Potential Flooding, for the Lopez Dam (County of San Luis Obispo 2009). Impacts would be less than significant.



- j. Flood from seiche or tsunami conditions are not expected to occur as the project site is located approximately 10 miles from the Pacific Ocean. As the site is primarily flat and does not contain substantial slopes, impacts related to mudflow would not occur.

**Mitigation and Residual Impact:**

In order to avoid surface water quality impacts during construction, the following mitigation is required.

**MM HYD-1: Construction Stormwater Management Plan**

The construction contractor shall prepare a Storm Water Management Plan that includes Best Management Practices (BMPs) to be implemented and monitored prior to and during construction. The following BMPs shall be incorporated into the SWMP or to minimize potential water quality impacts:

1. Disturbed areas shall be stabilized or re-vegetated prior to the start of the rainy season; Impacts to vegetation shall be minimized. The work area shall be flagged to identify its limits. Vegetation shall not be removed or intentionally damaged beyond these limits.
2. Construction materials and soil piles shall be placed in designated areas where they could not enter water bodies or storm drains due to spillage or erosion.
3. Waste and debris generated during construction shall be stored in designated waste collection areas and containers away from watercourses, and shall be disposed of regularly.
4. During construction, washing of concrete trucks, paint, equipment, or similar activities shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site. Wash water shall not be discharged to the storm drains, street, drainage ditches, creeks, or wetlands. The concrete washout area shall be isolated from water bodies, and wash water and waste shall be removed from the project site. The location of the washout area shall be clearly noted at the construction site with signs.
5. All fueling of heavy equipment shall occur in a designated area removed from water bodies and other drainages, such that any spillage would not enter surface waters. The designated refueling area shall include a drain pan or drop cloth and absorbent materials to clean up spills. The location of the fueling area shall be clearly noted at the construction site with signs.

6. Vehicles and equipment shall be maintained properly to prevent leakage of hydrocarbons and coolant, and shall be examined for leaks on a daily bases. All maintenance shall occur in a designated offsite area. The designated area shall include a drain pan or drop cloth and absorbent materials to clean up spills.
7. Any accidental spill of hydrocarbons or coolant that may occur on the construction site shall be cleaned up immediately. Absorbent materials shall be maintained on the construction site for this purpose.
8. Temporary placement of fill shall be located outside of any drainage ways.

Implementation of measures provided in the university’s Water Quality Management Plan, project-specific SWPPP, and Mitigation Measure HYD-1, would ensure impacts to water quality during construction would be less than significant.

### 3.10 LAND USE AND PLANNING

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
Environmental Issues – Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Discussion

- a. The project site is located northeast of the central campus core, in an agriculturally dominant portion of the campus. The project site is bounded by the E-Surplus Building, Rose Float Lab site, and associated surface parking lot to the north; the Crops Unit to the south; and active agricultural fields to the west and east. The proposed project site is currently undeveloped and supports active agricultural operations under the university’s College of Agriculture programs. As the project would be located in a rural portion of campus where little development or housing exists, the proposed project would not divide an established campus community. No impact would occur.

- b. The project site is designated “Outdoor Teaching and Learning” as delineated in the 2001 *Cal Poly Master Plan and Environmental Impact Report* (Cal Poly San Luis Obispo 2001). This land use allows for the operation of “living laboratories” in which students acquire applied skills in an outdoor, in-field setting. Outdoor Teaching and Learning sites include agricultural field operations, animal units, and research centers. Current campus land use for the proposed project site is AG-II and designated Cropland, which allows for horticulture and crop sciences, including post-harvest production activities such as winemaking and related fermentation of alcoholic beverages (Cal Poly San Luis Obispo 2010). Although the proposed project would convert active agricultural land to indoor classroom, research, and fermentation/alcoholic beverage production facilities within an academic structure, the proposed site would still support agricultural academic uses within the university’s College of Agriculture following project implementation. As such, the proposed project would not conflict with current land use as identified in the *Cal Poly Master Plan and Environmental Impact Report* or Campus Land Use and Design Guidelines.

Additionally, the proposed project would be constructed on the existing Cal Poly San Luis Obispo campus and would not be located immediately adjacent to City of San Luis Obispo residential and commercial retail land uses. As part of the California State University system, the proposed project would not be subject to City of San Luis Obispo General Plan or municipal land use regulations (City of San Luis Obispo 2010). Impacts would be less than significant.

- c. There are no Habitat Conservation Plans (HCPs) or Natural Community Conservation Plans (NCCPs) that occur on or near the proposed project site. Therefore, the project would not have an impact on such plans.

### 3.11 MINERAL RESOURCES

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
Environmental Issues – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion**

- a. A-B: It was determined that no impacts to mineral resources would occur under the buildout of the Cal Poly Master Plan as noted in the *Cal Poly Master Plan and Environmental Impact Report* (Cal Poly San Luis Obispo 2001). The implementation of the proposed project would not involve the depletion of mineral resources, nor would it interfere with access to recover any identified mineral resources of local or State importance. Consequently, no impact to mineral resources would occur as a result of proposed project implementation.

**3.12 NOISE**

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
Environmental Issues – Would the project:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion**

- a. Possible increases in existing noise levels would be associated with certain aspects of the proposed project, including the introduction of three new academic structures to a currently undeveloped agricultural field and temporary construction noise impacts. The proposed

project is located in the extended campus, outside of the central campus core, and no sensitive receptors are located within close proximity to the proposed project site. Additionally, proposed project uses would resemble existing academic uses located in other portions of campus, and would not be considered a substantially noisier use than other academic structures or program-related uses on campus. Moreover, on-site uses are not expected to exceed established noise standards for the area. Impacts would be less than significant.

- b. Although construction activities associated with the proposed project would result in temporary increases in noise levels and groundborne vibration in the immediate project area, there are no off-site sensitive receptors located near the proposed development site or on the Cal Poly San Luis Obispo campus that would be affected by the proposed development. The closest off-site sensitive receptors are private residences and a church located approximately 0.3 mile south of the site, west of California Boulevard. Additionally, the proposed project site is located outside of the central campus core in an agriculturally dominant portion of campus characterized by open agricultural fields, agriculture-related structures, equipment storage areas, and public and institutional access roads. No blasting, pile driving, or other special construction methods associated with excessive noise or groundborne vibration are anticipated during project construction. Therefore, it is anticipated that noise and vibration generated during construction or operation of the proposed project would not affect sensitive receptors. Impacts would be less than significant.
- c. Once operational, the proposed project would include additional sources of noise from outdoor mechanical equipment associated with new buildings, facilities, and utility improvements, as well as increased vehicular traffic. However, as described above, the project site is distant from both off-site and on-site noise-sensitive receivers. Traffic from the project would be relatively minor; the preliminary traffic study conducted by the project traffic consultant (Fehr & Peers 2013a) conservatively estimated that approximately 37 AM trips and approximately 33 PM trips per day would result from operation of the project. When distributed onto the two study intersection legs, the resulting added traffic volumes would result in a negligible effect on noise levels (0.1 dB or less, which is neither a readily measurable or an audible change in the noise environment). Therefore, this impact would be less than significant.
- d. As described above (impact discussion b), construction noise would temporarily increase noise in the area immediately surrounding the project. However, due to the project's distance from noise-sensitive land uses, and the size and scale of the proposed project, impacts would be less than significant.

- e. E-F: The proposed project site is not located within an airport land use plan, and is not located within 2 miles of a public or private airstrip. The closest airport is the San Luis Obispo County Regional Airport, located approximately 4.2 miles from the project site. Therefore, noise associated with airports would be less than significant.

### 3.13 POPULATION AND HOUSING

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
Environmental Issues – Would the project:				
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Discussion

- a. A-C: The proposed project would relocate and consolidate existing on-campus academic activities associated with viticulture and fermentation sciences and would not increase the existing campus student population, thus avoiding the need for additional housing facilities elsewhere. Additionally, the project would not include a residential component, resulting in additional area population growth. Moreover, as the proposed fermentation sciences facility would be constructed on a currently undeveloped site, the project would not displace existing housing or people. No impacts would occur.

**3.14 PUBLIC SERVICES**

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
Environmental Issues – Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion**

- a. Cal Poly contracts with the City of San Luis Obispo Fire Department for fire protection and suppression within the core of campus and the California Department of Forestry and Fire Protection is the responding agency for fire protection and suppression services for the balance of campus. The City of San Luis Obispo Fire Department is the first responder to fires within the campus’ Local Response Area, and the California Department of Forestry and Fire Protection is the first responder to fires within the State Response Area of campus, including agricultural facilities and surrounding lands outside of the campus core. The proposed project is located within the State Response Area of campus (Cal Poly San Luis Obispo 2012). The proposed project would entail construction of three additional buildings on campus within an existing undeveloped site, which would add additional structures requiring protection by the city and state fire protection services. Although three new buildings would be introduced to the campus, the proposed structures would be located adjacent to existing development associated with the Crops Units on campus, and direct access to the site would be provided along Mt. Bishop Road for emergency fire-fighting and evacuation in the event of a fire. Additionally, as with all new buildings constructed on campus, the proposed structure would be subject to review and approval by the California State Fire Marshal and would be required to comply with the Uniform Building Code and Fire Code, which would include interior fire sprinklers to be installed as part of project design. In addition to campus fire safety precautions, the proposed project would not increase student enrollment or personnel utilizing the site, as the project would relocate and consolidate existing viticulture and fermentation activities on campus, nor would the project change existing academic support uses that would result in a significant increase in demand

for fire services. Moreover, the addition of 42,000 square feet of academic space on campus would not warrant the expansion of fire services to the campus. Impacts would be less than significant.

- b. Police protection services for the project site would be provided by the Cal Poly University Police Department. As discussed, the project would involve relocation and consolidation of the existing viticulture and fermentation academic uses on campus and would not increase student enrollment on campus, nor would the project include a residential component resulting in increased growth in the area that would place a greater demand on local police services. Additionally, the construction of the project would not alter or expand the University Police Department's existing service area. Therefore, implementation of the proposed project would not result in the need for new or expanded police services. Impacts would be less than significant.
- c. The proposed project does not include a residential component; therefore, the proposed project would not generate additional demand for elementary and secondary schools in the surrounding community. Additionally, the fermentation sciences facility is not expected to result in an increased demand for workers or increase employment on campus. Therefore, impacts to existing schools or the need for additional schools would not occur.
- d. The proposed project would not result in an increased demand on local or regional parks. The Cal Poly campus currently supports existing open space/park and recreational facilities. The proposed project would involve relocation and consolidation of existing on-campus viticulture and fermentation sciences academic uses and would not increase the existing campus student population, thus not resulting in the need for additional recreational or open space facilities. Impacts would be less than significant.
- e. The proposed project would not result in adverse impacts related to the provision of other public facilities, such as libraries. The proposed project would not generate an increase in student or faculty population that would result in an increase demand in public services. Impacts would be less than significant.



### 3.15 RECREATION

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
Environmental Issues – Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Discussion

- a. A-B: Existing athletic, recreational, and open space areas are provided on campus for use by students and the campus community. The proposed project would entail relocation and consolidation of existing on-campus viticulture and fermentation sciences academic uses and would not increase the existing campus student population, thereby avoiding any resulting need for additional recreational or open space facilities. Impacts would be less than significant.

### 3.16 TRANSPORTATION AND TRAFFIC

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
Environmental Issues – Would the project:				
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Background

The university first envisioned this proposal in 2013 as a single structure on the same project site, two stories in height, and containing approximately 22,000 square feet of usable floor area. Of that total floor area, approximately 1,800 square feet was dedicated to offices (supporting a population of 18, including faculty and grad students); 6,200 square feet was dedicated to lab space (accommodating 40 students at a time); 2,900 square feet was dedicated to classroom (accommodating 60 students at a time); and the balance of the structure was intended to support production area for wines and other alcoholic beverages. Fehr & Peers was retained by the university to prepare a traffic assessment for the 2013 version of the proposal.

Fehr & Peers developed specific traffic generation factors to address the 2013 version of the proposed facility, taking into account the unique use patterns for each of the principle “occupancies” of the structure (i.e., offices, lab space, classroom). The open production area of the facility was not assigned a separate traffic generation factor, because this space was largely to be occupied by equipment and aging vessels, and the student and faculty members carrying out activities in the production area were accounted for in the remaining occupancy categories.

The currently proposed fermentation sciences center would include a total floor area of approximately 42,000 square feet. However, the increase in floor area compared to the 2013 proposal would be entirely comprised of production area and ancillary space (lobby, restrooms, storage, janitorial, etc.). Again, this production area (represented by the “Winery” building and the “Brewery/Distillery building) would not have a separate traffic generating potential, because the people carrying out activities there would already be at the facility in association with the office, lab, or classroom space provided in Grange Hall. A conceptual space plan has been

prepared for Grange Hall which provides information regarding office, classroom, and lab space; interior space planning for the Winery and Brewery/Distillery building has not yet been conducted, as these are intended to be largely open floor production areas, with flexibility for equipment and storage vessel placement.

Table 3.16-1 compares the statistics regarding traffic generating components between the 2013 proposal addressed in the Fehr & Peers traffic assessment and the currently proposed fermentation sciences center proposal.

**Table 3.16-1  
Programming Space Comparison**

Occupancy	2013 Proposal		Current Proposal	
	Square Feet	Population	Square Feet	Population
Offices	1,800	18	1,600	18
Classroom	2,900	60	2,000	60 ≤
Lab	6,200	40	3,600	40 ≤
Production Area Restrooms Storage Janitorial Internal Circulation	11,100	0	34,800	0
TOTALS	22,000	118	42,000	118 ≤

Since the space provided for each of the traffic generating components is less in the current proposal than in the 2013 proposal, the assumed project population (which is based upon floor area per student for the labs and classroom) would also be lower for the current proposal. Consequently peak hour traffic generation, which is based upon facility population, would also be reduced for the current proposal, compared to the 2013 proposal evaluated in the Fehr & Peers traffic assessment. Given the Fehr & Peers study did not identify significant traffic and circulation impacts, and that no mitigations were deemed necessary, there should be no change to the classification of significance for traffic impacts via reductions in the space dedicated to traffic generating components of the proposal. Consequently, the Fehr & Peers assessment can be used as a conservative analysis of the traffic and circulation effects of the currently proposed fermentation sciences center proposal.

The following section is based upon information regarding transportation and traffic derived from the Preliminary Focused Transportation Study for the 2013 version of the proposed project prepared by Fehr and Peers (Fehr and Peers 2013a) and the associated Cumulative Conditions Analysis Memorandum (Fehr and Peers 2013b); the Fehr & Peers work is deemed to represent a conservative analysis of the traffic and circulation effects of the currently proposed fermentation sciences center proposal. The Preliminary Transportation Study and the Cumulative Conditions Analysis Memorandum are attached as Attachments A and B, respectively, to this document.

#### **Discussion**

- a. The proposed project has the potential to increase the number of trips taken on San Luis Obispo's primary bus transit line, SLO Transit. Since transit lines running to and from campus currently experience periods where transit demand outpaces available bus capacity (particularly during heavy rain conditions), additional transit trips generated by the project may exacerbate over-capacity conditions on SLO Transit. This does not constitute a significant impact per the CSU manual or the City of San Luis Obispo Traffic Impact Analysis Preparation Guidelines (March 2015). Additionally, no bicycle-related impacts are expected as a result of the proposed project, as the project would neither significantly disrupt existing or planned facilities, nor would it significantly conflict with applicable non-automotive transportation plans, guidelines, policies, or standards (Fehr and Peers 2013a). Impacts would be less than significant.
- b. Vehicle trip generation is typically performed using site-specific trip generation rates from data collected at similar project sites, or using data from the Institute of Transportation Engineers' *Trip Generation Manual*. However, due to the unique transportation setting of the Cal Poly campus, such as rates of on-campus living, site-specific transportation mode split, etc., these methodologies may not provide an accurate estimate of actual trip generation resulting from the proposed project. Project-specific trip generation estimates were developed for the proposal using a set of conservative assumptions. Assumptions were made in regards to the proportion of fermentation sciences students that live on campus, the occupancy of the buildings (students and staff), utilization of space during the AM and PM Peak Hours, and mode split for the students and faculty. The results of the trip generation analysis are presented in Table 3.16-2.

**Table 3.16-2  
Trip Generation**

Project Component <sup>1</sup>	Occupancy <sup>2</sup>	% of Occupancy Arriving/Departing During Peak Hour <sup>3</sup>	% Off-campus trips <sup>4</sup>	Off-Campus Mode Share <sup>5</sup>	Driving Trips (In/Out) <sup>6</sup>
<i>AM Peak Hour (7:30 a.m.–8:30 a.m.)</i>					
Department Offices	3	100%/0%	100%	100% Drive	3/0
Faculty Offices (8 offices)	8	100%/0%	100%	100% Drive	8/0
Cellar Master Office	1	100%/0%	100%	100% Drive	1/0
Vineyard Manager Office	1	100%/0%	100%	100% Drive	1/0
6,200 SF Lab Space (150 SF/Student)	40	50%/0%	75%	60% Drive 40% Walk, Bike, Transit	9/0
2,900 SF Classroom (50 SF/Student)	60	50%/0%	75%	60% Drive 40% Walk, Bike, Transit	14/0
500 SF Graduate Student Offices (100 SF/Student)	5	50%/0%	75%	75% Drive 25% Walk, Bike, Transit	1/0
Total AM Driving Trips (In/Out)					37/5 <sup>7</sup>
<i>PM Peak Hour (3:30 p.m.–4:30 p.m.)</i>					
Faculty Offices (8 offices)	8	0%/50%	100%	100% Drive	0/4
6,200 SF Lab Space (150 SF/Student)	40	25%/100%	75%	60% Drive 40% Walk, Bike, Transit	5/18
2,900 SF Classroom (50 SF/Student)	60	40%/40%	75%	75% Drive 25% Walk, Bike, Transit	11/11
Total PM Driving Trips (In/Out)					16/33

Source: Fehr & Peers 2013a.

SF = square feet

<sup>1</sup> All department office staff, Cellar Master, and Vineyard Manager are proposed to move to new building.

<sup>2</sup> Occupancy of component at listed assumed occupancy.

<sup>3</sup> Proportion of occupancy arriving/departing project site in the AM/PM Peak Hour.

<sup>4</sup> Percentage of off-campus trips calculated by  $100\% - (\text{Continuing Student on-campus beds}) / (75\% * \text{University Enrollment}) = 100\% - 3500 \text{ beds} / 14071 \text{ non-freshmen students enrolled} \approx 75\%$ .

<sup>5</sup> Off-campus mode share is estimated based on existing transit, bicycle, and pedestrian facilities available.

<sup>6</sup> Driving trips = Occupancy \* % Arriving/Departing \* % off-campus trips \* off-campus drive mode share.

<sup>7</sup> While most students and staff will arrive during the morning Peak Hour, there is the potential for some outbound trips (deliveries, janitorial staff, etc.) to also occur.

Because overall campus enrollment is not expected to increase as part of the project, the project would not directly generate any net new vehicle trips. However, an increase in the number of classes the university may offer could offset the shift of existing wine, viticulture and other fermentation science related trips from the campus core (where wine, viticulture and fermentation staff and classes are currently located) to the project site. While an

increase in the number of classes the university will offer is yet to be determined, this analysis conservatively assumes that all trips generated by this project are to be added to existing volumes (Fehr and Peers 2013a).

The distribution of project trips on the roadway is primarily based on the relative distribution of existing traffic on local roadways. For Cal Poly, the three primary gateways into campus are Grand Avenue, California Boulevard, and Highland Drive. A gateway also exists on Stenner Creek Road north of the project site, but given the extra distance required to travel to the campus core, this gateway would likely generate a very low number of project trips (Fehr and Peers 2013a).

Two-day, 48-hour pneumatic tube counts were conducted on roadways in the study area when the intersection turning movements were performed in May 2012. The data for the three gateway count locations was summarized for the AM and PM intersection Peak Hours to determine the percent of wine and viticulture student and staff trips that use each gateway. Given the speed limits and travel distances associated with the three gateways, it is assumed an equal proportion of project trips would use the Highland Drive and California Boulevard gateways to campus. Trips were assigned from the gateways through the study intersections based on existing intersection volumes. Intersection level of service under project conditions is presented in Table 3.16-3.

**Table 3.16-3  
Project Conditions Intersection Levels of Service**

Intersection		Peak Hour	Existing Conditions		Project Conditions	
			<i>Delay</i>	<i>LOS<sup>1</sup></i>	<i>Delay</i>	<i>LOS<sup>1</sup></i>
1	Highland Drive/Santa Rosa Street (State Route 1 (SR-1))	AM	24.6	C	25.7	C
		PM	28.4	C	29.2	C
2	Foothill Boulevard/Santa Rosa Street (SR-1)	AM	37.8	D	37.9	D
		PM	43.3	D	43.4	D

Source: Fehr & Peers, June 2013.

AM = morning peak hour; PM = afternoon peak hour

<sup>1</sup> LOS = Level of Service. LOS calculations conducted using the Synchro7 level of service analysis software package, which applies the methodology described in the 2000 HCM.

Both study intersections continue to operate acceptably with the addition of project trips (Fehr and Peers 2013a). Therefore, impacts to these study intersections are considered less-than-significant under project conditions.

For the purposes of analyzing cumulative impacts, the State Route 1 Major Investment Study was utilized along with the following significance criteria from the CSU Transportation Study Manual (Fehr and Peers 2013b):

- 1) A roadway segment or intersection operates at Level of Service (LOS) D or better under a no project scenario and the addition of project trips causes overall traffic operations on the facility to operate at LOS E or F.
- 2) A roadway segment or intersection operates at LOS E or F under a no project scenario and the project adds both 10 or more Peak Hour trips and 5 seconds or more of Peak Hour delay, during the same Peak Hour.
- 3) If an intersection operates at a very poor LOS F (control delay of 120 seconds or more), the significance criterion shall be an increase in v/c (volume-to-capacity) ratio of 0.02 or more.

The results of the cumulative conditions analysis are shown in Table 3.16-4.

**Table 3.16-4  
Cumulative Conditions Intersection Levels of Service**

Intersection		Peak Hour	Cumulative Without Project Conditions		Cumulative With Project Conditions	
			Delay	LOS <sup>1</sup>	Delay	LOS <sup>1</sup>
1	Highland Drive/Santa Rosa Street	AM	36.2	D	37.0	D
		PM	33.6	D	33.9	D
2	Foothill Boulevard/Santa Rosa Street (State Route 1)	AM	87.5	F	88.2	F
		PM	82.5	F	83.7	F

Source: Fehr and Peers 2013b.

AM = morning peak hour; PM = afternoon peak hour

<sup>1</sup> LOS = Level of Service

Bold indicates deficient intersection operations.

The State Route 1 Major Investment Study forecasts that the Foothill Boulevard/Santa Rosa Street intersection would operate at LOS F in the future (2035). Since Highland Drive/Santa Rosa Street operates at LOS D, criteria 1 was applied to this intersection. Criteria 2 was applied to the Foothill Boulevard/Santa Rosa Street intersection, which has no project scenario delays of less than 120 seconds, but operates at LOS F. Based on these criteria, the impacts at both intersections would be less than significant. The Highland Drive/Santa Rosa Street intersection does not degrade to LOS E or F with the addition of project trips, and the addition of project trips at Foothill Boulevard/Santa Rosa Street does not add 5 seconds or more of Peak Hour delay to the intersection. Therefore, no study intersection impacts in the near-term or the far-term scenarios after the addition of project trips to the intersections would occur. Impacts would not be cumulatively considerable.

- c. The proposed project site is not located within an airport land use plan, and is not located within 2 miles of a public or private airstrip. The closest airport is the San Luis Obispo County Regional Airport, located approximately 4.2 miles from the project site. Therefore, the project would not result in a change in air traffic patterns. No impacts would occur.
- d. The proposed project may include farm equipment associated with the agricultural uses present adjacent to the site and within this portion of campus. However, proposed uses for the site would be compatible with existing land uses and would not include hazardous circulation features. Additionally, the project would not substantially change circulation in the project area such that a hazardous transportation design feature would be constructed. Impacts would be less than significant.
- e. Emergency access to the site and surrounding area occurs via Mt. Bishop Road. The proposed project would not result in alterations to Mt. Bishop Road, therefore provision of emergency access to the project and/or surrounding area would not be affected by the project. Impacts would be less than significant.
- f. No bicycle impacts are expected as a result of the proposed project as the project would neither significantly disrupt existing or planned facilities, nor would it significantly conflict with applicable non-automotive transportation plans, guidelines, policies, or standards. Impacts would be less than significant.

### 3.17 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
Environmental Issues – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation	Less Than Significant New or Increased Impact	No New or Increased Impact
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion**

The proposed fermentation sciences center facility would necessitate services, such as electricity, natural gas, communication systems, water, sewer, and storm drainage.

- a. A and E: The proposed project would include the construction of new wastewater infrastructure associated with the proposed academic, laboratory, and production buildings. As the proposed fermentation sciences center would not include a residential component resulting in on-campus population growth, and wastewater generated on-site would primarily be associated with daytime, academic use while classes are in session. Therefore, wastewater generation is not anticipated to be substantial such that wastewater treatment requirements of the Regional Water Quality Control Board would be exceeded. Additionally, because the project would include the construction of approximately 42,000 square feet of academic space, and would not involve development on campus such that wastewater demand would substantially increase, it is anticipated that treatment provision for the site would be adequately accommodated. Impacts are expected to be less than significant.
- b. B and D: The proposed project would include installation of new potable water infrastructure to support the three new buildings. As the proposed fermentation sciences center would not include a residential component resulting in on-campus population growth, and water consumed on-site would primarily be associated with daytime, academic use, water consumption is not anticipated to be substantial such that the construction of new water treatment facilities or a substantial increase in on-campus water demand would occur. Impacts would be less than significant.
- c. New stormwater infrastructure would be installed throughout the project site similar to stormwater facilities associated with other buildings on campus. Proposed stormwater

facilities would be designed to capture and convey anticipated stormwater runoff for the site. The construction of such facilities for three structures totaling approximately 42,000 square feet would not be considered substantial and would not cause significant environmental effects. Impacts would be less than significant.

- f. F and G: The proposed fermentation sciences center would be outfitted with traditional trash and recycling service. As the proposed fermentation sciences center would not include a residential component resulting in on-campus population growth, a substantial increase in solid waste generation is not anticipated. Additionally, the proposed project would be consistent with all state and local regulations regarding solid waste diversion, and at least 50% of the campus’ solid waste is diverted to a licensed recycling facility. Impacts would be less than significant. Maintaining the existing diversion rate would ensure compliance with Assembly Bill 75, which requires all large state facilities to divert at least 50% of solid waste from landfills. Therefore, a less-than-significant impact to solid waste policies and programs would occur.

### 3.18 MANDATORY FINDINGS OF SIGNIFICANCE

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

**Discussion**

- a. As described in Section 3.4, Biological Resources, the area planned for development does not support substantial populations of rare, threatened, or endangered plant or animal species or sensitive plant communities. The project site is located within an agriculturally dominant portion of the Cal Poly campus northeast of the central campus core. The project would occur within designated croplands as the project site was previously graded and leveled. As such, the project sites do not support native vegetation. There are four sensitive natural communities located on the Cal Poly campus: California native grassland, Coastal and Valley freshwater marsh, wet meadow/freshwater seep, and riparian open water and associated habitat. The project would not involve removal of any of these sensitive communities.

Approximately seven mature coast live oaks are located within the project site near the northeast corner of the proposed Grange Hall improvements, along Mt. Bishop Road. The project could directly affect (through trimming, removal, or modification to the root system within the drip line) these mature coast live oak trees, and therefore impacts could occur for which adequate mitigation has been required. Because the project would necessitate the removal of croplands, landscaping, and/or ornamental vegetation that may be used by nesting birds or roosting bats, mitigation is required to avoid potential significant impacts to these species.

The Stenner Creek riparian area, which is dominated by sycamore and coast live oak, is buffered by a paved road and fence line, and no portion of the project would be located within the riparian area. However, since Stenner Creek is at an elevation below the project site, surface water quality impacts associated with the project could affect Stenner Creek; however, adequate mitigation has been required to address this potential impact. Additionally, since the project site is located within agricultural lands and would not impact the adjacent riparian area, the project would not impact the important areas for avian species moving along the Pacific Flyway.

There are no “waters of the United States”/“waters of the state”/CDFW-jurisdictional streambeds within the project area; however, all construction activity shall be managed under an SWPPP that will ensure that all site runoff is of appropriate quality and quantity before it enters the campus drainage system. The project site is not within a wildlife corridor. Moreover, there are no adopted HCPs; NCCPs; or other local, regional, or state HCPs applicable to the project. For this reason, the proposed project would not have the potential to: (1) substantially reduce the habitat of a fish or wildlife species, (2) cause a fish or wildlife population to drop below self-sustaining levels, (3) threaten or eliminate a plant or animal community, or (4) reduce the number or restrict the range of a rare or endangered plant or animal. The proposed project is located on land characterized as active agriculture;

therefore, construction of the project is anticipated to have a less-than-significant impact on biological resources.

- b. The addition of approximately 42,000 square feet of academic and program support space for the on-campus fermentation sciences center would not result in substantial construction impacts, and construction activities would be short-term, temporary, and localized to the project site. Impacts during construction activities would be mitigated to a level that is less than significant, and would not contribute to a significant cumulative impact when considered in combination with other projects that may occur on campus. Additionally, the proposed project would be consistent with the Cal Poly Master Plan and Environmental Impact Report (Cal Poly San Luis Obispo 2001), which guides future development on campus, and would be consistent with the Campus Land Use and Design Guidelines (Cal Poly San Luis Obispo 2010). As a result, operational impacts would not be cumulatively considerable. All project construction and operational impacts would be mitigated to a less-than-significant level, and would not, in combination with other projects, be considered cumulatively considerable.

See also discussion (b) under Section 3.16 above.

- c. Adverse direct or indirect affects to human beings may occur as a result of impacts related to aesthetics, air quality, cultural resources, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, noise, public services, transportation and traffic, and utilities and service systems. Mitigation from the *Cal Poly Master Plan and Environmental Impact Report* has been provided, as well as additional mitigation measures specified, to ensure impacts remain below a level of significance. This IS/MND concludes potential adverse effects to humans are either less than significant or can be mitigated to a less-than-significant level with the implementation of mitigation. Therefore, the proposed project does not involve any activities, during either construction or operation, that would cause significant adverse effects on human beings that cannot be readily mitigated to a less-than-significant level.

## 4.0 INFORMATIONAL SOURCES

---

- 14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- 75 FR 12816-12959. Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the California Red-legged Frog. Final Rule. March 17, 2010.
- Burt, William Henry and Richard Philip Grossenheider. 1980. *A Field Guide to the Mammals: North America north of Mexico* (The Peterson Field Guide Series; third edition). Houghton Mifflin Company, Boston. 289 pp.
- California Department of Conservation (CDC). 2010. “San Luis Obispo County Important Farmland 2008 Map.” California Department of Conservation, Division of Land Resources Protection, Farmland Mapping and Monitoring Program. November 2010.
- CDC. 2012. “San Luis Obispo County Williamson Act 2009/2010 Map.” Department of Conservation, Division of Land Resources Protection, Williamson Act Program.
- CDC. 2013. “Regulatory Maps.” California Geological Survey. Accessed June 26, 2013. [http://www.quake.ca.gov/gmaps/ap/ap\\_maps.htm](http://www.quake.ca.gov/gmaps/ap/ap_maps.htm).
- California Geological Survey . 2007 *Fault-Rupture Hazard Zones in California: Alquist-Priolo Earthquake Fault Zoning Act with Index to Earthquake Fault Zones Maps*. Interim Revision. Special Publication 42. Sacramento, California: California Department of Conservation, California Geological Survey. Accessed August 17, 2011. [http://www.consrv.ca.gov/CGS/information/publications/database/Publications\\_index.asp](http://www.consrv.ca.gov/CGS/information/publications/database/Publications_index.asp)
- Caltrans (California Department of Transportation). 2012. “Officially Designated State Scenic Highways.” July 11, 2012. Accessed June 24, 2013. <http://www.dot.ca.gov/hq/LandArch/scenic/schwy.htm>.
- Cal Poly San Luis Obispo (California State Polytechnic University, San Luis Obispo). 2001. *Cal Poly Master Plan and Environmental Impact Report*. March 21, 2001.
- Cal Poly San Luis Obispo. 2005. *Water Quality Management Plan for Cal Poly Land in San Luis Obispo Creek and Chorro Creek Watersheds*. Prepared for Regional Water Quality Control Board, Central Coast Office, Region 3. January 2005.
- Cal Poly San Luis Obispo. 2009. *Campus Land Use and Design Guidelines*. Campus Aesthetic Consistency Program. Last updated May 2009.

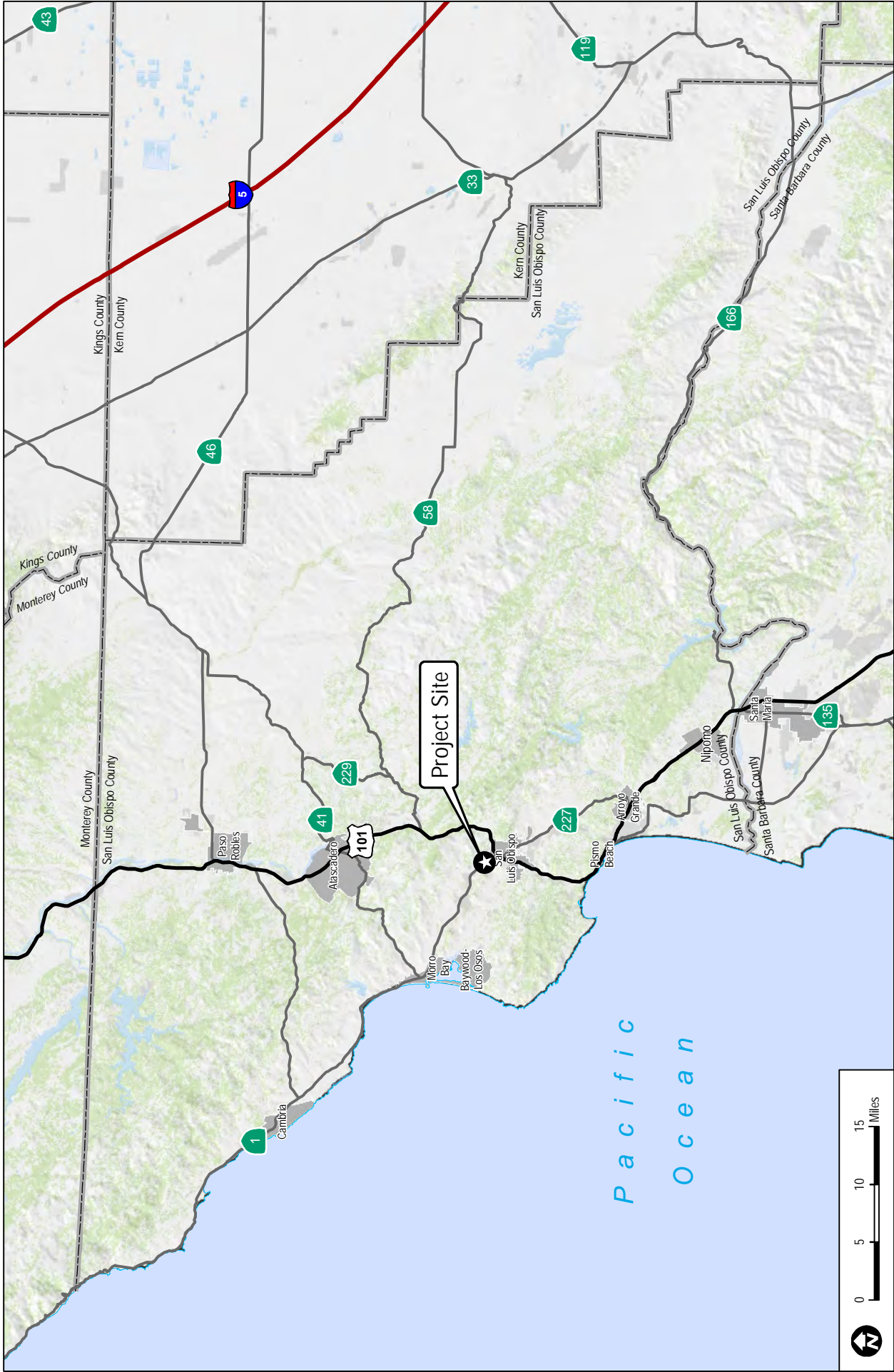
- Cal Poly San Luis Obispo. 2010. Campus Land Use and Design Guidelines.
- Cal Poly San Luis Obispo. 2012. *Annual Fire Safety Report*. September 2012 (For Calendar Year 2011).
- Cal Poly San Luis Obispo. 2013. *Cal Poly San Luis Obispo Campus Emergency Management Plan*. Revised May 8, 2013.
- CDFW (California Department of Fish and Wildlife). 2016. California Natural Diversity Database (CNDDDB). RareFind, Version 5.1.1 (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. Accessed January 2017. <https://www.wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>
- City of San Luis Obispo. 2006. “Figure 9, Scenic Roadways and Vistas.” In *City of San Luis Obispo General Plan*. Conservation and Open Space Element. Last updated April 4, 2006.
- City of San Luis Obispo. 2010. *City of San Luis Obispo General Plan*. Land Use Element. Last updated June 15, 2010.
- City of San Luis Obispo. 2012. *City of San Luis Obispo General Plan*. Safety Element. Last updated June 15, 2010.
- City of San Luis Obispo. 2015. *City of San Luis Obispo Multimodal Transportation Impact Study Guidelines*, March 2015.
- County of San Luis Obispo. 2009. Natural Hazards Map: Dam Failure Inundation Areas. County of San Luis Obispo, Department of Planning and Building. April 30, 2009.
- CSU (California State University). 2011. “CSU Seismic Requirements.” California State University, Office of the Chancellor. December 21, 2011.
- Fehr and Peers. 2013a. *Memorandum. Preliminary Focused Transportation Study for the Proposed Cal Poly Fermentation Sciences Center in San Luis Obispo, California*. June 28, 2013.
- Fehr and Peers. 2013b. *Memorandum. Cumulative Conditions Analysis for the Proposed Cal Poly Fermentation Sciences Center in San Luis Obispo, California*. August 1, 2013.
- Neel, J. 2013. Phone conversation between J. Neel (Cal Poly San Luis Obispo) and S. Lozano (Dudek). July 11, 2013.

SLOCAPCD (San Luis Obispo County Air Pollution Control District). 2001. *Clean Air Plan*. San Luis Obispo County. December 2001.

SLOCAPCD. 2012. *CEQA Air Quality Handbook. A Guide for Assessing the Air Quality Impacts for Projects Subject to CEQA Review*. April 2012.

Thomson, Robert C., Amber N. Wright, and H. Bradley Shaffer. 2016. *California Amphibian and Reptile Species of Special Concern*. California Department of Fish and Wildlife. University of California Press.

USFWS (United States Fish and Wildlife Service). 2002. *Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*)*. Region 1. Portland, OR. May 28.



**FIGURE 1**  
**Regional Map**





INTENTIONALLY LEFT BLANK



Copyright © 2013 National Geographic Society

**FIGURE 2**  
**Project Vicinity**

**DUDEK**

7864

INTENTIONALLY LEFT BLANK



**FIGURE 3**  
**Project Site**

Cal Poly Fermentation Sciences Center Initial Study/ MND

**DUDEK**

7864

INTENTIONALLY LEFT BLANK



**FIGURE 4**  
**Project Site Plan**

INTENTIONALLY LEFT BLANK



**DUDEK**

7864

**FIGURE 5**  
**Project Rendering**

Cal Poly Fermentation Sciences Center Initial Study / MND



INTENTIONALLY LEFT BLANK

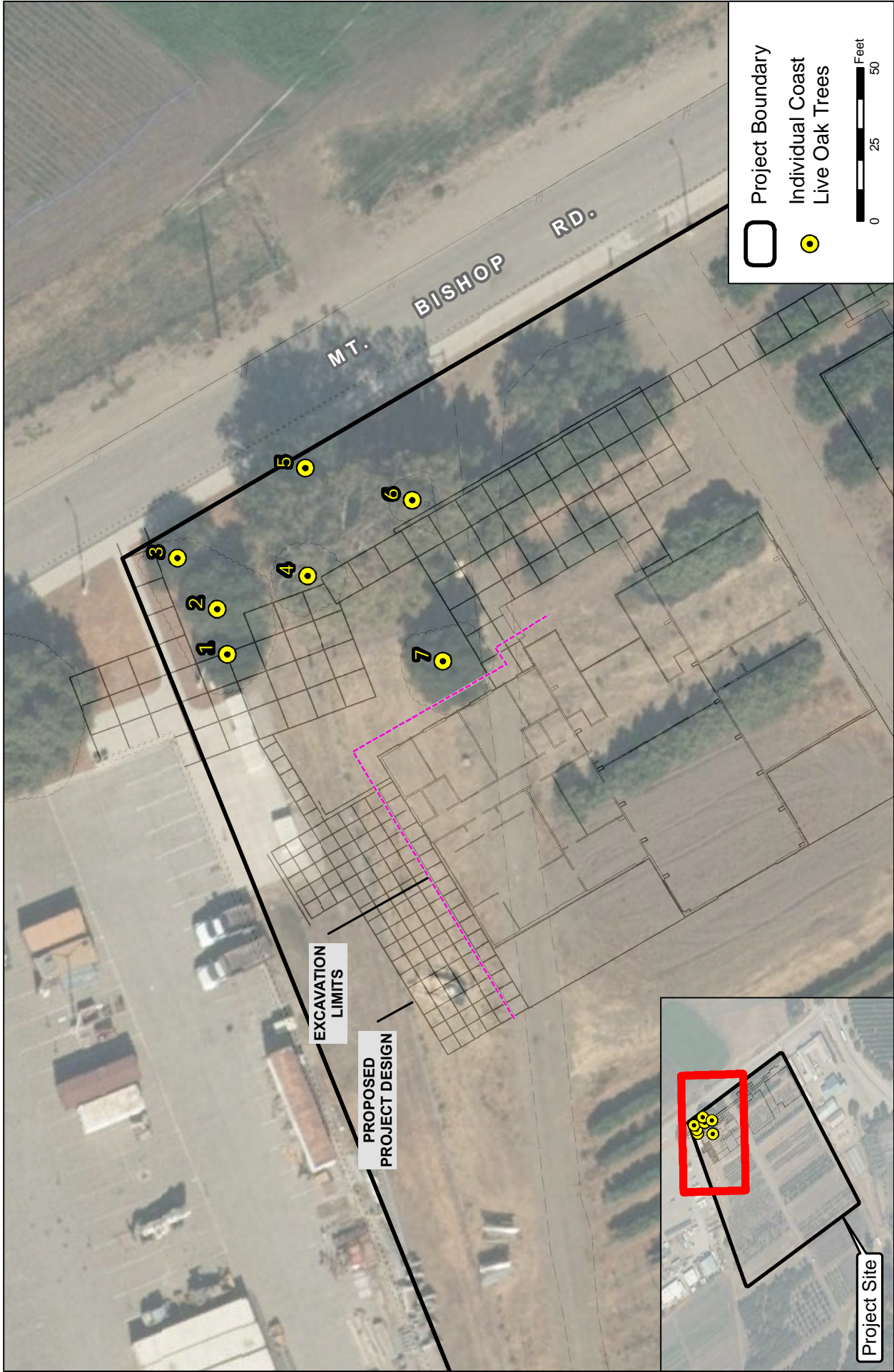


FIGURE 6

**Oak Tree Locations**

Cal Poly Fermentation Sciences Center Initial Study/ MND

INTENTIONALLY LEFT BLANK

## **ATTACHMENT A**

Preliminary Focused Transportation Study – Fehr & Peers – August 7, 2013

## MEMORANDUM

Date: August 7, 2013

To: Sarah Lozano, Dudek

From: Ian Barnes and Matt Haynes, Fehr & Peers

**Subject: *Preliminary Focused Transportation Study for the Proposed Cal Poly Wine and Viticulture Innovation Center in San Luis Obispo, CA***

SJ13-1448

---

### INTRODUCTION

The purpose of this memorandum is to summarize the results of the preliminary focused transportation study for the proposed Cal Poly Wine and Viticulture Innovation Center. The project site is located on Mt. Bishop Road on the Cal Poly campus, as shown in **Figure 1**.

The purpose of this study is to determine potentially significant adverse impacts on the surrounding transportation system. If potentially significant impacts are found, a comprehensive Transportation Impact Analysis may be required as part of a more detailed environmental study.

### ***Project Description***

The Cal Poly Wine and Viticulture Innovation Center will be located along Mt. Bishop Road approximately 500 feet north of Highland Drive. The parcel is currently agricultural lane and is located between the H1 parking lot and Building 17 (the Crops Unit). The site is northwest of the main campus core. The proposed project includes a 22,000 gross square foot building that will house the Department of Wine and Viticulture and include space for classrooms, labs, faculty and graduate student offices, and storage space. The Department plans to move from its current space in Building 11 (near the core of campus) to the Center once it is constructed. No increase in student enrollment is proposed as part of the project. Parking demand generated by the Center would be accommodated in the H1 parking lot.

### ***Study Area***

Transportation network impacts were evaluated at two off-campus intersection located in the City of San Luis Obispo. The two study intersections are:

1. Highland Drive/Santa Rosa Street (State Route 1)
2. Foothill Boulevard/Santa Rosa Street (State Route 1)

On-campus intersections were not included as part of this analysis based on discussions with University staff. When the two busiest on-campus intersections experience high levels of congestion, traffic control officers are dispatched to manually control traffic when necessary (typically in the morning).



Figure 1

**Study Area and Study Intersections**





The two intersections closest to the project site (Highland Drive/Mt. Bishop Road and Highland Drive/California Boulevard) were observed during a field visit to operate with little to no congestion in the AM and PM peak hours.

### ***Analysis Scenarios***

The operations of the study intersections were evaluated during the weekday morning (AM) and afternoon (PM) peak hours for the following two scenarios:

**Scenario 1:** *Existing Conditions* - Existing volumes obtained from counts in May 2012, and existing lane configurations, intersection controls, and signal operations as determined during field visits in May 2013.

**Scenario 2:** *Existing plus Project Conditions* - Scenario 1 volumes and transportation system plus traffic generated by the proposed project. No modifications to the roadway system were assumed as part of the proposed project.

Given the preliminary nature of the study, no far-term scenarios (i.e. "Background" or "Cumulative" scenarios) were analyzed as part of this study. Analysis of additional study scenarios may be required if the proposed project causes potential significant transportation impacts (such that a full Transportation Impact Analysis would be required).

### ***Analysis Methods***

The operations of roadway facilities are typically described with the term Level of Service. Level of Service (LOS) is a qualitative description of traffic flow based on such factors as speed, travel time, delay, and freedom to maneuver. Six levels are defined from LOS A, the best operating conditions, to LOS F, the worst operating conditions. LOS E represents "at-capacity" operations. When traffic volumes exceed the capacity, stop-and-go conditions result, and operations are designated as LOS F.

Based on the California State University (CSU) Transportation Study Manual (November 2012) the method described in Chapter 16 of the Transportation Research Board's *2000 Highway Capacity Manual* (HCM) was used to conduct the level of service calculations for the study intersections. Control delay includes the initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The average control delay for signalized intersections was calculated using the Synchro 7 traffic analysis software and correlated to a LOS designation as shown in **Table 1**.

Signalized intersection operations and impacts were evaluated based on the thresholds presented in Table 3 of the CSU Transportation Study Manual. The LOS standard (i.e. minimum threshold for acceptable operations) for off-campus study intersections is LOS D. Since Cal Poly is a state agency, the project is exempt from local planning and engineering directives. However, the CSU Transportation Study Manual directs study preparers to use the LOS thresholds of the appropriate local jurisdiction. The City of San Luis Obispo's LOS standard is LOS D.



<b>TABLE 1            SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS            USING AVERAGE CONTROL VEHICULAR DELAY</b>		
<b>Level of Service</b>	<b>Description</b>	<b>Average Control Delay Per Vehicle (Seconds)</b>
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	≤ 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	55.1 to 80.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	> 80.0

*Source: Highway Capacity Manual, Transportation Research Board, 2000.*

The remainder of this memorandum describes the existing transportation system serving the project site, the current operating conditions of the study intersections, and the operating conditions of the transportation system serving the project site with the construction of the proposed project.

### **EXISTING CONDITIONS**

This section describes the existing conditions of the roadway facilities, pedestrian and bicycle facilities, and transit service in the study area. It also presents existing traffic volumes and operations for the study intersections.

The project site is surrounded by primarily agricultural area on the Cal Poly campus. The H1 parking lot (general parking) is located immediately north of the project site. Building 17 – the “Crops Unit” – is located immediately south of the project site. The core of campus lies southeast of the project site. Those wishing to travel between the campus core and the project site must use the Union Pacific Railroad (UPRR) underpass along Highland Drive.

#### ***Existing Roadway Network***

Santa Rosa Street (State Route 1), California Boulevard, Grand Avenue and Foothill Boulevard provide regional access to the project site. Highland Drive and Mt. Bishop Road provide local access to the project site. Descriptions of these roadways are presented below. Figure 1 shows the location of these facilities in relation to the project site.





*Santa Rosa Street (State Route 1)* is a north-south arterial roadway that runs from downtown San Luis Obispo to the northern edge of the City. From there, the roadway continues as State Route 1 towards Morro Bay and the communities along the North Coast of San Luis Obispo. The facility is located east of the project site and provides access to campus and the project site via Highland Drive. In addition, the route continues south of the study area into downtown San Luis Obispo. Near the project site, the street is a four lane, divided roadway that carries an average daily traffic (ADT) volume of approximately 31,000 vehicles per day.

*California Boulevard* is a north-south arterial roadway that runs from Highland Drive (on the Cal Poly campus) in the north to San Luis Drive in the south. The facility provides access to the project site via Highland Drive and the UPRR underpass. The roadway terminates at Highland Drive just west of the project site and carries approximately 8,700 vehicles per day just south of the campus boundary.

*Grand Avenue* is a north-south arterial roadway that runs from Monterey Street in the south into the heart of the Cal Poly campus. The facility provides access to the southeast corner of campus, where most of the parking on the south side of campus is provided. Near the campus border, Grand Avenue carries approximately 12,500 vehicles per day.

*Foothill Boulevard* is an east-west arterial roadway that runs from Los Osos Valley Road in the west to the Cal Poly campus boundary in the east (where it terminates at a cul-de-sac). The facility provides access to campus and the project site via Santa Rosa Street and California Boulevard. Between Santa Rosa Street and California Boulevard, Foothill Boulevard carries approximately 16,500 vehicles per day.

*Highland Drive* is an east-west arterial roadway that runs from the northwest corner of the City of San Luis Obispo in the west to Via Carta on the Cal Poly campus in the east. The roadway connects to Mt. Bishop Road near the project site. Near Via Carta, Highland Drive provides access to the parking lots north of the campus core. East of Santa Rosa Street, Highland Drive carries approximately 7,000 vehicles per day.

*Mt. Bishop Road* is a north-south local roadway that runs from Stenner Creek Road in the north to Highland Drive in the south. The intersection with Highland Drive is located approximately 500 feet south of the project site. Vehicles accessing the project site will park in parking lot H1 along Mt. Bishop Road. Mt. Bishop Road is a low volume roadway and carries less than 1,000 vehicles per day.

### ***Pedestrian Facilities***

Pedestrian facilities consist of sidewalks, crosswalks, and pedestrian signals. Sidewalks are provided on south side of Highland Drive from Santa Rosa Street to California Boulevard. A sidewalk exists on the north side of Highland Drive for approximately 120 feet west of the Highland Drive/California Boulevard intersection. From there, a dirt pathway leads to the intersection of Highland Drive/Mt. Bishop Road. A sidewalk is located adjacent to frontage of the project site along the west side of Mt. Bishop Road that extends from the H1 parking lot to Building 17. The sidewalk does not resume until the Highland Drive/Mt. Bishop Road intersection (a distance of about 225 feet). No sidewalks are provided along the east side of Mt. Bishop Road.



There are no marked crosswalks at the Highland Drive/Mt. Bishop Road intersection. Marked crosswalks are provided at the Highland Drive/California Boulevard intersection.

### ***Bicycle Facilities***

Bikeway planning and design in California typically rely on guidelines and design standards established by California Department of Transportation (Caltrans) in the *Highway Design Manual* (Chapter 1000: Bikeway Planning and Design). There are three types of bikeway facilities, as described below and shown on the accompanying figures.

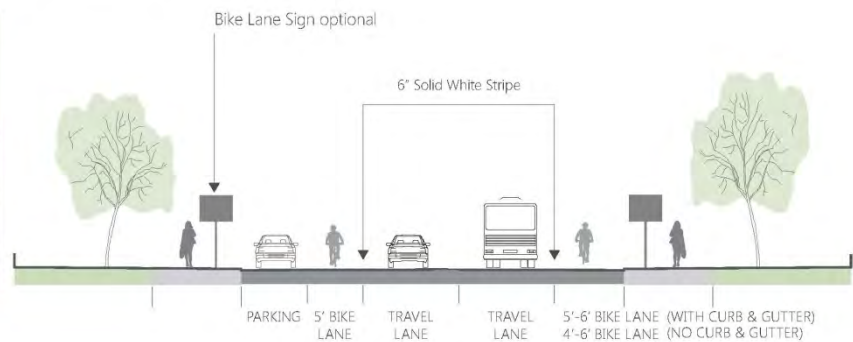
*Class I Bikeway (Bike Path)* provides a completely separate right-of-way and is designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian cross-flow minimized. In general, bike paths serve corridors not served by streets and highways or where sufficient right-of-way exists to allow such facilities to be constructed away from the influence of parallel streets and vehicle conflicts.

Provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flow minimized.



*Class II Bikeways (Bike Lanes)* are lanes for bicyclists generally adjacent to the outer vehicle travel lanes. These lanes have special lane markings, pavement legends, and signage. Bicycle lanes are generally five (5) to six (6) feet wide. Adjacent vehicle parking and vehicle/pedestrian cross-flow are permitted.

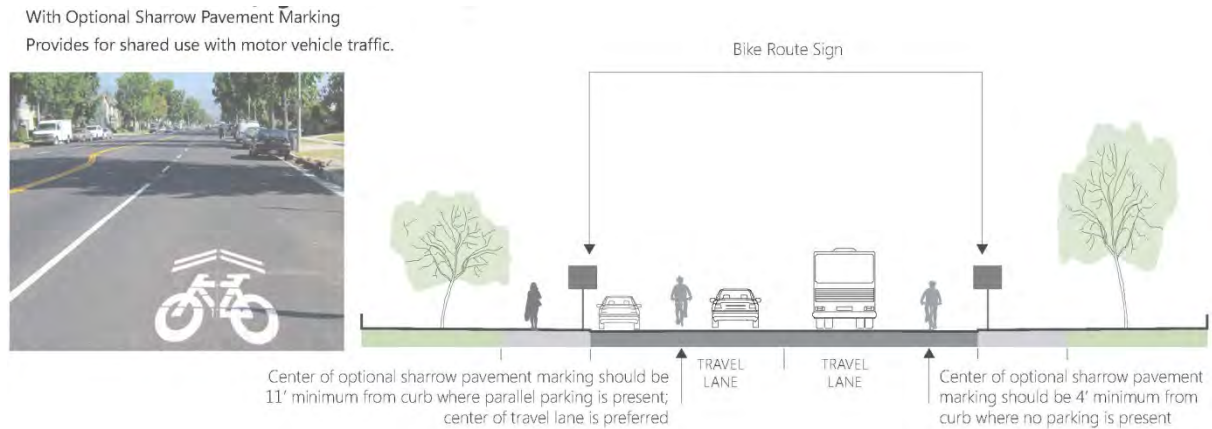
Provides a striped lane for one-way bike travel on a street or highway.



*Class III Bikeway (Bike Route)* are designated by signs or pavement markings for shared use with pedestrians or motor vehicles, but have no separated bike right-of-way or lane striping. Bike



routes serve either to: a) provide continuity to other bicycle facilities, or b) designate preferred routes through high demand corridors.



Near the project site, Class II bicycle facilities are provided along the length of Highland Drive from Santa Rosa Street to Via Carta. Class II bicycle facilities are also provided along California Boulevard near the project site. A Class I bicycle facility parallels California Boulevard from Mustang Stadium south to Hathaway Avenue. This facility is proposed to be extended southward, paralleling the UPRR tracks towards the southern portions of San Luis Obispo. Class II facilities are also provided along Foothill Boulevard and Santa Rosa Street. However, the high volume of traffic on these roadways discourages bicycle use. No bicycle facilities are provided along Mt. Bishop Road, but the low traffic volume on the roadway invites bicycle use.

**Existing Transit Service**

The site is served by San Luis Obispo City Transit (SLO Transit) and Regional Transit Authority (RTA) bus lines. The bus lines that serve the project site are described in detail below and summarized in **Table 2**.

TABLE 2 EXISTING TRANSIT SERVICE SUMMARY							
Route	From <sup>1</sup>	To <sup>1</sup>	Distance to Nearest Stop <sup>2</sup>	Weekdays		Weekends	
				Operating Hours	Peak Hour Headway <sup>3</sup> (minutes)	Operating Hours	Headway <sup>3</sup> (minutes)
<b>SLO Transit</b>							
4 <sup>4</sup>	Madonna/Los Osos Valley Road	Downtown Transit Center	0.40	6:34 a – 10:44 a	30	8:10 a – 6:05 p	60
5 <sup>4</sup>	Downtown Transit Center	Madonna/ Los Osos Valley Road	0.40	6:20 a – 7:22 p	30	8:20 a – 6:17 p	60



<b>TABLE 2 EXISTING TRANSIT SERVICE SUMMARY</b>							
Route	From <sup>1</sup>	To <sup>1</sup>	Distance to Nearest Stop <sup>2</sup>	Weekdays		Weekends	
				Operating Hours	Peak Hour Headway <sup>3</sup> (minutes)	Operating Hours	Headway <sup>3</sup> (minutes)
6a	Cal Poly Kennedy Library	Ramona/Palomar	0.05	7:16 a – 10:19 p	30	9:10 a – 5:29 p	60
6b	Cal Poly Kennedy Library	Downtown Transit Center	0.40	7:02 a – 10:56 p	30	8:45 a – 5:56 p	60
<b>RTA</b>							
9	Downtown San Luis Obispo	San Miguel	0.40	5:30 a – 9:40 p	30-60	7:01 a – 8:54 p	120 - 180
10 <sup>5</sup>	Downtown San Luis Obispo / Cal Poly Kennedy Library (select runs)	Santa Maria	0.40	5:45 a – 6:20 p	30	No weekend service to Cal Poly campus	
12	Downtown San Luis Obispo	Morro Bay/ Los Osos	0.40 <sup>5</sup> 0.90	6:23 a – 10:03 p	60	7:23 a – 8:28 p	120
14	Downtown San Luis Obispo	Cuesta College	0.90	7:42 a – 4:00 p	60	No weekend service	
<p>Notes:</p> <ol style="list-style-type: none"> <li>Routes run in both directions, except SLO Transit routes 4 and 5</li> <li>Distance in miles from nearest stop to nearest Cal Poly Wine and Viticulture Innovation Center access point.</li> <li>Headways are defined as the time interval between two transit vehicles traveling in the same direction over the same route.</li> <li>Routes generally follow the same roadways and routes, but run in opposite directions</li> <li>Cal Poly express service only</li> </ol> <p>AM = morning commuter period          PM = evening commute period          Source: SLO Transit and RTA websites, June 2013.</p>							

SLO Transit serves the City of San Luis Obispo; the nearest stop for most lines is located at the Cal Poly Kennedy Library. SLO Transit Line 6a has a closer stop – Highland Drive/Mt. Bishop Road. RTA generally serves commuters from around the broader San Luis Obispo County region. RTA Routes 12 and 14 serve the North Coast of San Luis Obispo County, and Route 9 serves



communities north of the Cuesta Grade (Santa Margarita, Atascadero, Paso Robles, etc.). Route 10 serves areas south of San Luis Obispo, including direct service to Santa Maria.

SLO Transit buses traveling to and from campus are generally full during peak ridership periods. RTA buses generally have spare capacity, even during peak ridership periods.

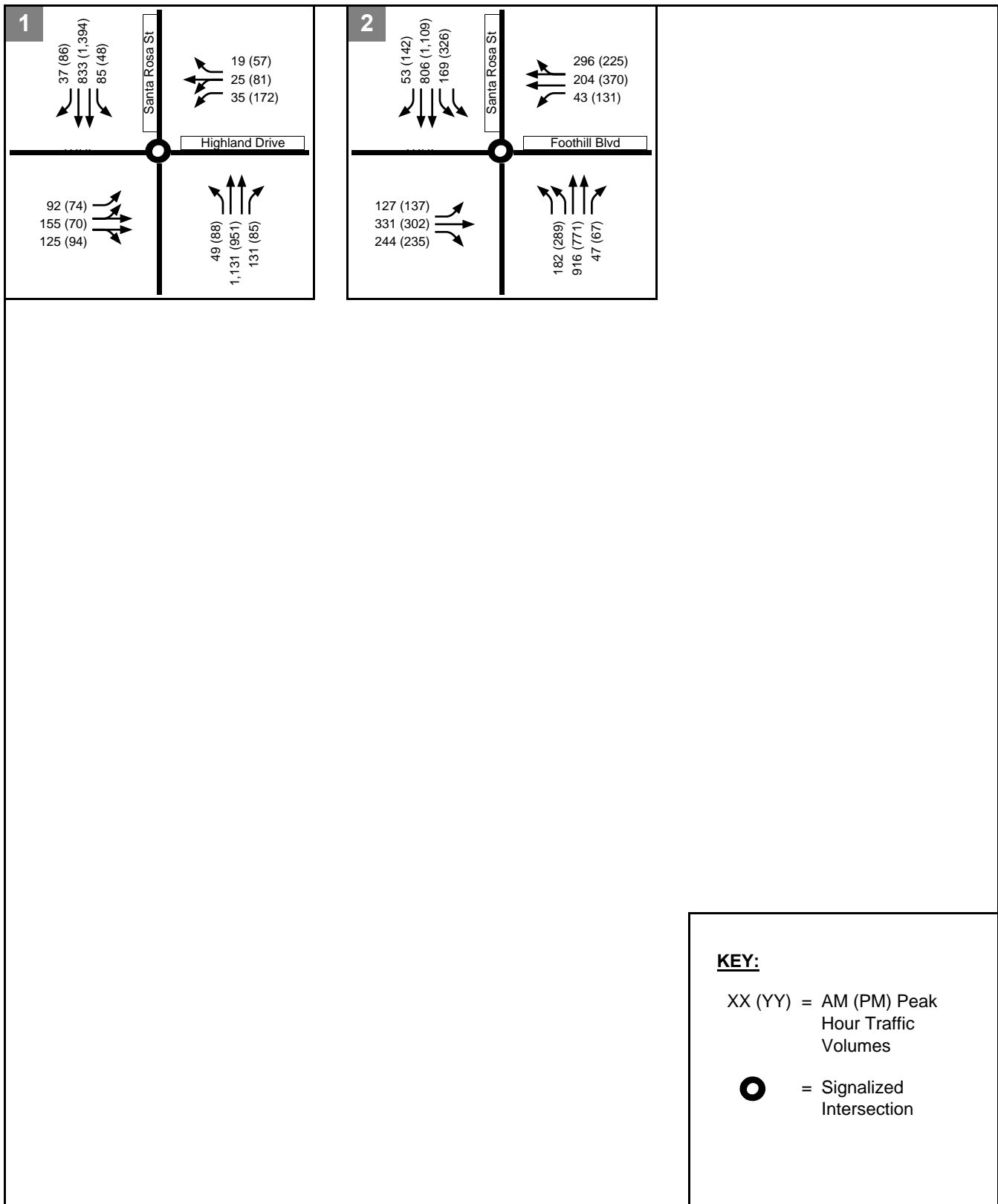
**Existing Intersection Volumes and Lane Configurations**

The existing operations of the study intersections were evaluated for the highest one-hour volume during the weekday morning (7:00 am to 9:00 am) and afternoon (3:00 pm to 5:00 pm) peak (commute) periods. AM and PM peak-hour intersection turning movement counts were conducted in May 2012 by the City of San Luis Obispo. Copies of the traffic counts are included in **Appendix A. Figure 2** presents the existing AM and PM peak-hour turning movement volumes, lane configurations, and traffic control devices at the study intersections.

**Existing Intersection Levels of Service**

The results of the LOS analysis using the Synchro7 software program for Existing Conditions are shown below in **Table 3**. The results of the analysis show that both study intersections operate at acceptable levels during the AM and PM peak periods based on the LOS standard for the City of San Luis Obispo (LOS D).

<b>TABLE 3 EXISTING INTERSECTION LEVELS OF SERVICE</b>					
<b>Intersection</b>		<b>Peak Hour<sup>1</sup></b>	<b>Intersection Control</b>	<b>Delay</b>	<b>LOS<sup>2</sup></b>
1	Highland Drive/Santa Rosa Street (State Route 1)	AM PM	Signal	24.6 28.4	C C
2	Foothill Boulevard/Santa Rosa Street (State Route 1)	AM PM	Signal	37.8 43.3	C D
Notes: 1 AM = morning peak hour, PM = afternoon peak hour. 2 LOS = Level of Service. LOS calculations conducted using the Synchro7 level of service analysis software package, which applies the methodology described in the 2000 HCM. <b>Bold</b> indicated deficient intersection operations. Source: Fehr & Peers, June 2013.					



Cal Poly Wine and Viticulture Innovation Center

**EXISTING INTERSECTION VOLUMES, LANE CONFIGURATIONS AND INTERSECTION CONTROL**

**FIGURE 2**



## PROJECT CONDITIONS

This section describes the methodology used to determine the trip estimates, trip distribution and trip assignment for the project. This section also describes the conditions of the roadway facilities, pedestrian and bicycle facilities, and transit service in the study area after the construction and occupancy of the Cal Poly Wine and Viticulture Innovation Center.

### ***Trip Generation***

While vehicle trip generation is typically performed using site-specific trip generation rates from data collected at similar project sites, or using data from the Institute of Transportation Engineers' *Trip Generation*. However, due to the unique transportation setting of the Cal Poly campus, such as rates of on-campus living, site-specific transportation mode split, etc., these methodologies may not provide an accurate estimate of actual trip generation resulting from the planned project. Owing to the lack of data regarding programmed uses (utilization of space, student occupancy, etc.) at this time, the trip generation was developed for the project was developed using a set of conservative assumptions. Assumptions were made in regards to the proportion of Wine and Viticulture students that live on campus, the occupancy of the building (students and staff), utilization of space during the AM and PM peak hours, and mode split for the students and faculty. The results of the trip generation analysis are presented in **Table 4**.



**TABLE 4  
 TRIP GENERATION**

<b>Project Component<sup>1</sup></b>	<b>Occupancy<sup>2</sup></b>	<b>% of Occupancy Arriving/Departing During Peak Hour<sup>3</sup></b>	<b>% Off-campus trips<sup>4</sup></b>	<b>Off-Campus Mode Share<sup>5</sup></b>	<b>Driving Trips (In/Out)<sup>6</sup></b>
<b>AM Peak Hour (7:30-8:30 AM)</b>					
Department Offices	3	100%/0%	100%	100% Drive	3/0
Faculty Offices (8 offices)	8	100%/0%	100%	100% Drive	8/0
Cellar Master Office	1	100%/0%	100%	100% Drive	1/0
Vineyard Manager Office	1	100%/0%	100%	100% Drive	1/0
6200 SF Lab Space (150 SF/Student)	40	50%/0%	75%	60% Drive 40% Walk, Bike, Transit	9/0
2900 SF Classroom (50 SF/Student)	60	50%/0%	75%	60% Drive 40% Walk, Bike, Transit	14/0
500 SF Graduate Student Offices (100 SF/Student)	5	50%/0%	75%	60% Drive 40% Walk, Bike, Transit	1/0
<b>Total AM Driving Trips (In/Out)</b>					<b>37/5<sup>7</sup></b>
<b>PM Peak Hour (3:30-4:30 PM)</b>					
Faculty Offices (8 offices)	8	0%/50%	100%	100% Drive	0/4
6200 SF Lab Space (150 SF/Student)	40	25%/100%	75%	60% Drive 40% Walk, Bike, Transit	5/18
2900 SF Classroom (50 SF/Student)	60	40%/40%	75%	60% Drive 40% Walk, Bike, Transit	11/11
<b>Total PM Driving Trips (In/Out)</b>					<b>16/33</b>
Notes:					
1. All department office staff, Cellar Master, and Vineyard Manager are proposed to move to new building. SF = Square Feet					
2. Occupancy of component at listed assumed occupancy					
3. Proportion of occupancy arriving/departing project site in the AM/PM peak hour					
4. Percentage of off-campus trips calculated by $100\% - (\text{Continuing Student on-campus beds}) / (75\% * \text{University Enrollment}) = 100\% - 3500 \text{ beds} / 14071 \text{ non-freshmen students enrolled} \approx 75\%$					
5. Off-campus mode share is estimated based on existing transit, bicycle and pedestrian facilities available.					
6. Driving trips = Occupancy * % Arriving/Departing * % off-campus trips * off-campus drive mode share					
7. While most students and staff will arrive during the morning peak hour, there is the potential for some outbound trips (deliveries, janitorial staff, etc.) to also occur.					
Source: Fehr & Peers, June 2013.					





Because overall campus enrollment is not expected to increase as part of the project, the project will not directly generate any net new vehicle trips. However, an increase in the number of classes the University may offer may offset the shift of existing Wine and Viticulture related trips from the campus core (where Wine and Viticulture staff and classes are currently located) to the project site. While an increase in the number of classes the University will offer is yet to be determined, this analysis conservatively assumes that all trips generated by this project are to be added to existing volumes.

***Trip Distribution and Assignment***

The distribution of project trips on the roadway is primarily based on the relative distribution of existing traffic on local roadways. For Cal Poly, the three primary gateways into campus are Grand Avenue, California Boulevard and Highland Drive. A gateway also exists on Stenner Creek Road north of the project site, but given the extra distance required to travel to the campus core, this gateway will likely only serve a low number of project trips.

Two-day, 48-hour pneumatic tube counts were conducted on roadways in the study area when the intersection turning movements were performed in May 2012. The data for the three gateway count locations was summarized for the AM and PM intersection peak hours to determine the percent of Wine and Viticulture student and staff trips that use each gateway. This data is presented below in **Table 5**.

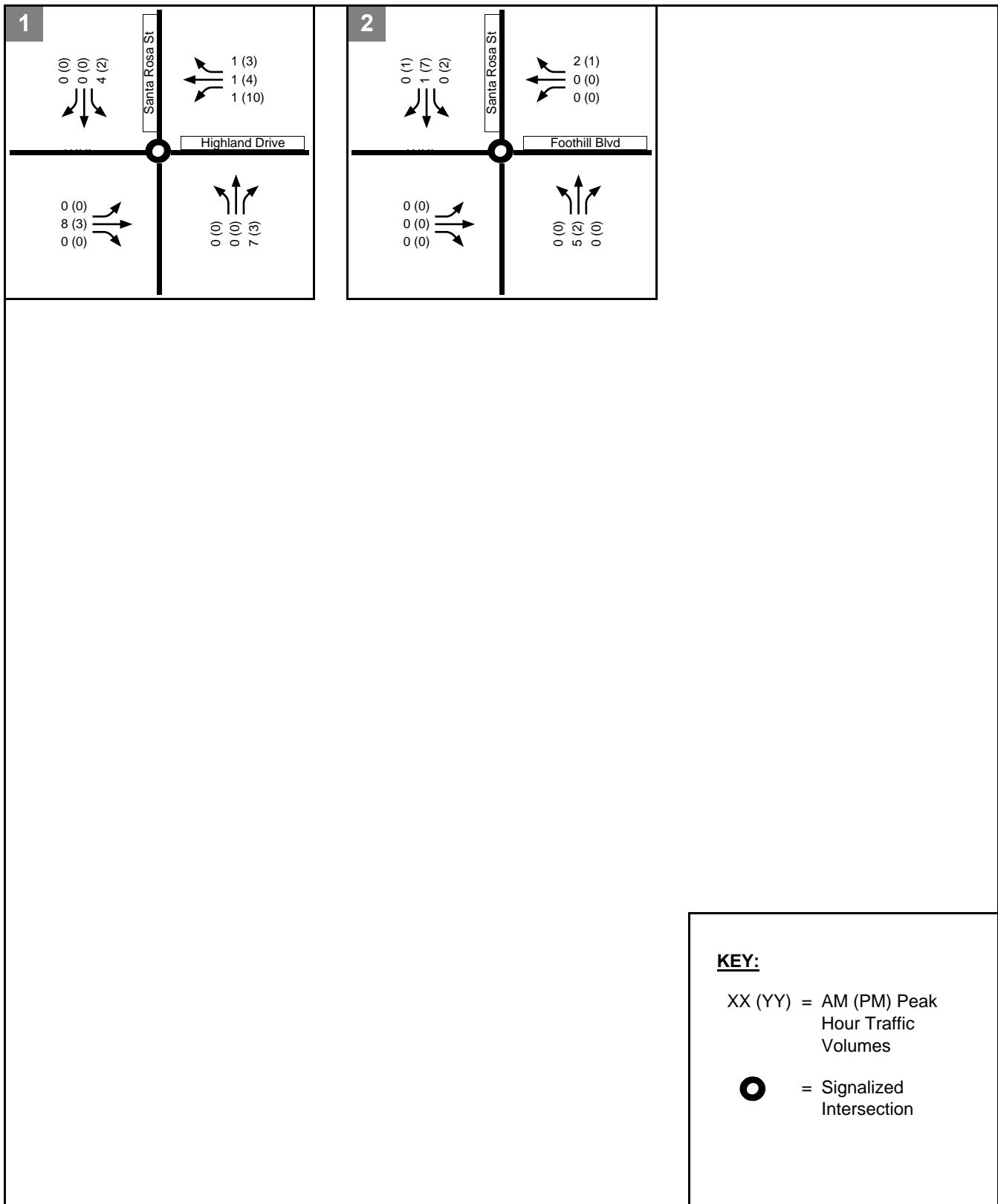
<b>TABLE 5 CAL POLY CAMPUS GATEWAY VOLUMES</b>					
<b>Gateway</b>	<b>AM Peak Hour</b>		<b>PM Peak Hour</b>		<b>% Project Trips in Analysis</b>
	<b>Volume</b>	<b>% Of Total</b>	<b>Volume</b>	<b>% Of Total</b>	
Grand Avenue	756	44%	696	32%	0% <sup>1</sup>
California Boulevard	525	30%	605	28%	50%
Highland Drive	456	26%	863	40%	50%
<i>Total</i>	<i>1,737</i>	<i>100%</i>	<i>2,164</i>	<i>100%</i>	<i>100%</i>

Notes:

- While a large proportion of overall Cal Poly trips use the Grand Avenue gateway to access parking lots and structures on the south side of campus, we expect that most trips for the Wine and Viticulture Innovation Center would use the California Boulevard or Highland Drive gateways to access parking lot H1.

Count data source: City of San Luis Obispo, May 2012. Analysis performed by: Fehr & Peers, June 2013.

Given the speed limits and travel distances associated with the three gateways, this analysis assumed an equal proportion of project trips would use the Highland Drive and California Boulevard gateways to campus. Trips were assigned from the gateways through the study intersections based on existing intersection volumes. **Figure 3** shows the project trip assignment through the study intersections.



Cal Poly Wine and Viticulture Innovation Center



**Intersection Level of Service under Project Conditions**

The Existing Conditions Synchro7 model was modified to include the project trips assigned through the study intersections. All signal timings and intersection geometries were assumed to remain constant with the addition of project trips. The result of the Project Conditions analysis is shown below in **Table 6**.

TABLE 6 PROJECT CONDITIONS INTERSECTION LEVELS OF SERVICE						
Intersection		Peak Hour <sup>1</sup>	Existing Conditions		Project Conditions	
			Delay	LOS <sup>2</sup>	Delay	LOS <sup>2</sup>
1	Highland Drive/Santa Rosa Street (State Route 1)	AM	24.6	C	25.6	C
		PM	28.4	C	29.0	C
2	Foothill Boulevard/Santa Rosa Street (State Route 1)	AM	37.8	D	37.8	D
		PM	43.3	D	43.4	D

Notes:  
 1 AM = morning peak hour, PM = afternoon peak hour.  
 2 LOS = Level of Service. LOS calculations conducted using the Synchro7 level of service analysis software package, which applies the methodology described in the 2000 HCM.  
**Bold** indicates deficient intersection operations.  
 Source: Fehr & Peers, June 2013.

Both study intersections continue to operate acceptably with the addition of project trips. Therefore, impacts to these study intersections are considered less-than-significant under project conditions.

The *State Route 1 Major Investment Study* forecasts that the Foothill Boulevard/Santa Rosa Street intersection will operate at LOS F in the future (2035). Since the CSU Transportation Study Manual identifies significance criteria for analysis of intersections operating at LOS E or F, if evaluation of cumulative conditions is conducted as part of the environmental clearance process we recommend it evaluate these study intersections under 2035 conditions.

**Pedestrian, Bicycle and Transit Facilities**

As the site plan for the Wine and Viticulture Innovation Center has not been finalized, it cannot be determined if there would be any pedestrian impacts associated with the proposed project. However, Table 3 (“Significance Criteria”) of the *California State University Transportation Study Manual* lists potentially significant pedestrian impacts as:

- A project fails to provide safe pedestrian connections between campus buildings and adjacent streets and transit facilities.
- A project significantly disrupts existing or planned pedestrian facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.



Therefore we recommend that the project consider providing crosswalks at Highland Drive/Mt. Bishop Road and evaluate closing gaps in the sidewalk network between the project site and the campus core.

No bicycle impacts are expected with this project as the project will neither significantly disrupt existing or planned facilities, nor does it significantly conflict with applicable non-automotive transportation plans, guidelines, polices or standards. This finding may require additional review upon finalization of a site plan for the project.

The proposed project has the potential to increase the number of trips taken on SLO Transit. Since transit lines running to and from campus currently experienced period where transit demand outpaces available bus capacity (especially when it is raining), additional transit trips generated by the project may exacerbate over-capacity conditions on SLO Transit. This does not constitute a significant impact per the CSU manual or the City of San Luis Obispo Traffic Impact Analysis Preparation Guidelines.

### **SUMMARY AND RECOMMENDATIONS**

The proposed Wine and Viticulture Innovation Center project is not expected to cause significant impacts at Highland Drive/Santa Rosa Street and Foothill Boulevard/Santa Rosa Street under Existing plus Project Conditions. Given the initial nature of this study, changes to project data (size, scope, programmed uses) from the assumptions of this study may result in further analysis to determine if there would be impacts at these intersections.

No significant impacts are expected to bicycle facilities or transit service. Design of the proposed project should include the upgrading of pedestrian connections to facilitate convenient pedestrian travel between the project site and the transportation network.

We recommend a transportation circulation and access evaluation of the site plan (once finalized) be completed to evaluate the project for on-site circulation impacts.

**ATTACHMENT B**

Cumulative Conditions Analysis Memorandum – Fehr & Peers – August 1, 2013

## MEMORANDUM

Date: August 1, 2013

To: Sarah Lozano, Dudek

From: Ian Barnes and Matt Haynes, Fehr & Peers

**Subject:** *Cumulative Conditions Analysis for the Proposed Cal Poly Wine and Viticulture Innovation Center in San Luis Obispo, CA*

SJ13-1448

The purpose of this memorandum is to summarize the results of a cumulative conditions intersection analysis for the proposed Cal Poly Wine and Viticulture Innovation Center. **Table 1** details the results of the analysis.

TABLE 1 CUMULATIVE CONDITIONS INTERSECTION LEVELS OF SERVICE						
Intersection		Peak Hour <sup>1</sup>	Cumulative Without Project Conditions		Cumulative Plus Project Conditions	
			Delay	LOS <sup>2</sup>	Delay	LOS <sup>2</sup>
1	Highland Drive/Santa Rosa Street (State Route 1)	AM	36.2	D	37.0	D
		PM	33.6	D	33.9	D
2	Foothill Boulevard/Santa Rosa Street (State Route 1)	AM	<b>87.5</b>	<b>F</b>	<b>88.2</b>	<b>F</b>
		PM	<b>82.5</b>	<b>F</b>	<b>83.7</b>	<b>F</b>

Notes:  
 1 AM = morning peak hour, PM = afternoon peak hour.  
 2 LOS = Level of Service. LOS calculations conducted using the Synchro7 level of service analysis software package, which applies the methodology described in the 2000 HCM.  
**Bold** indicates deficient intersection operations. **Bold and highlighted** indicates a significant impact.  
 Source: Fehr & Peers, August 2013.

The applicable significance criteria from the CSU Transportation Study Manual are:

- 1) A roadway segment or intersection operates at LOS D or better under a no project scenario and the addition of project trips causes overall traffic operations on the facility to operate at LOS E or F
- 2) A roadway segment or intersection operate at LOS E or F under a no project scenario and the project adds both 10 or more peak hour trips and 5 seconds or more of peak hour delay, during the same peak hour.
- 3) If an intersection operates at a very poor LOS F (control delay of 120 seconds or more), the significance criterion shall be an increase in v/c (volume-to-capacity) ratio of 0.02 or more.



Since Highland Drive/Santa Rosa Street operates at LOS D, we used criteria 1. We used criteria 2 for Foothill Boulevard/Santa Rosa Street, which has no project scenario delays of less than 120 seconds, but operates at LOS F. Based on these criteria, the impacts at both intersections would be less-than-significant. Highland Drive/Santa Rosa Street does not degrade to LOS E or F with the addition of project trips, and the addition of project trips at Foothill Boulevard/Santa Rosa Street does not add 5 seconds or more of peak hour delay to the intersection.

To summarize, there are no study intersection impacts in the near-term (per the previous document) or far-term scenarios (per the above analysis) after the addition of project trips to the intersections.

If you have any questions, please call Ian Barnes at (408) 645-7015.

