



Technology Park Expansion Project

Draft Initial Study – Mitigated Negative Declaration

prepared by

California Polytechnic State University, San Luis Obispo

Facilities Planning and Capital Projects

1 Grand Avenue

San Luis Obispo, California 93407

Contact: Jeffrey Dumars

prepared with the assistance of

Rincon Consultants, Inc.

1530 Monterey Street, Suite D

San Luis Obispo, California 93401

August 2019



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

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Appendix C	Noise Modeling Worksheets

Initial Study

1. Project Title

Technology Park Expansion Project

2. Lead Agency Name and Address

California State University (CSU) Board of Trustees
401 Golden Shore
Long Beach, California 90802

3. Contact Person and Phone Number

Jeffrey Dumars
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Phone: (805) 756-6538
e-mail: jdumars@calpoly.edu

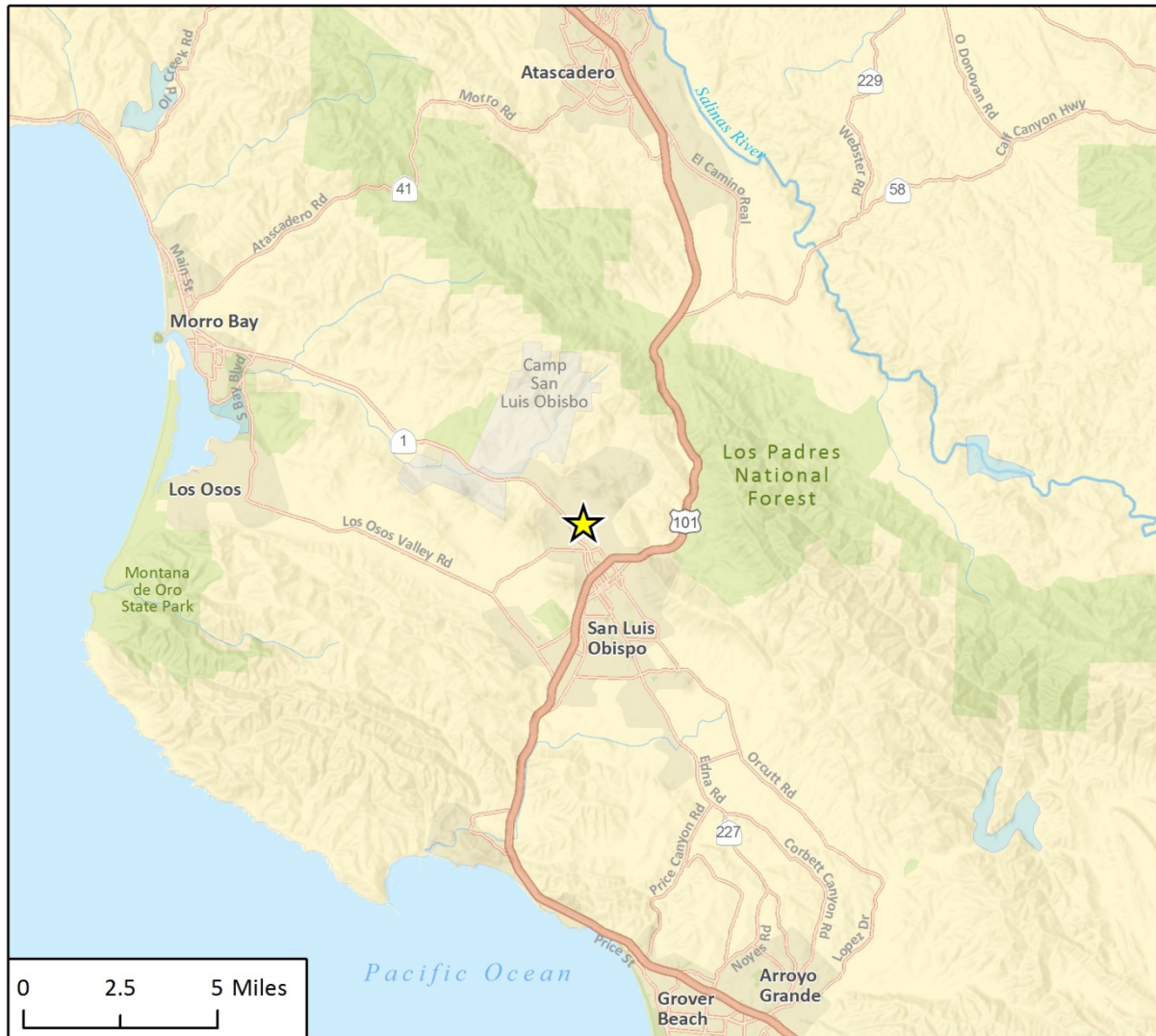
4. Project Proponent Name and Address

California Polytechnic State University, San Luis Obispo
1 Grand Avenue
San Luis Obispo, California 93407
Contact: Jeffrey Dumars

5. Project Location and Setting

California Polytechnic State University, San Luis Obispo (Cal Poly) is located northeast of the city of San Luis Obispo, approximately midway between San Francisco and Los Angeles on California's central coast. The university campus occupies over 6,000 acres. University lands include range and agricultural areas as well as natural preserves, in addition to more developed areas. Figure 1 shows the regional location of the project site, and Figure 2 depicts the project's location with respect to the campus academic core. Figure 3 shows the project location on a local scale. The project site is located along Mount Bishop Road northwest of the campus academic core, south of Building #83 (Technology Park) and west of Building #82 (Corporation Warehouse). The site is approximately three acres and currently contains parking, an open-air storage yard, trees, and landscaping.

Figure 1 Regional Location



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★ Project Location

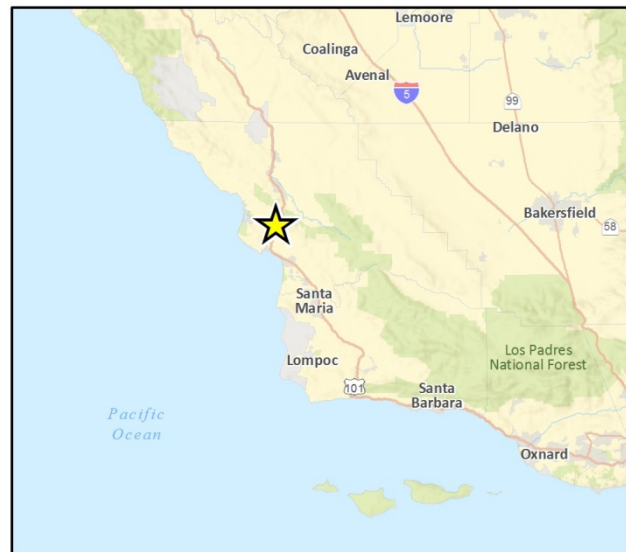


Fig 1 Regional Location

Figure 2 Project Vicinity



Imagery provided by Microsoft Bing, Esri and their licensors © 2019.

Fig 3 Project Vicinity

Figure 3 Project Location



Imagery provided by Microsoft Bing and its licensors © 2019.

Fig 2 Project Location

Local Planning Context

The 2001 Cal Poly Master Plan is the primary document governing land use and capital improvements on campus. The Master Plan includes several elements that guide development on campus, including but not limited to Campus Instructional Core, Residential Communities, Circulation, and Parking. The Master Plan establishes land uses for the entire campus and outlines principles to guide future development. The Master Plan does not set specific standards for development, but mitigation measures outlined in the Master Plan Environmental Impact Report (EIR) condition Master Plan implementation, when applicable.

Master Plan Designation

The project site is designated for building 82E (New Farm Shop/Transportation Services) and parking in the Master Plan. The New Farm Shop/Transportation Services facilities are intended to support campus operations.

6. Project Description

The project would include construction of a three story, 30,000-gross square foot (GSF) Technology Park Expansion building on Mount Bishop Road, that would provide infrastructure and programming in the areas of entrepreneurship, technology transfer, and innovation. Table 1 below summarizes the project components.

Table 1 Summary of Project

Use	Square Feet
Indoor Common Area/Meeting Space	2,500
Workforce Training/Development	5,000
Wet/Dry Labs	10,000
Office / Co-Working	10,000
Accelerator/Incubator/Flex	2,500
Total	30,000

Figure 4 shows a conceptual site plan. The maximum building height would be approximately 46 feet. Figure 5 shows the conceptual building height. Figure 6 shows the north and west elevation aerial view with building massing.

The project would include the removal of the existing parking lot and up to 20 trees. The parking spaces removed would be replaced inside the project boundary, shown on Figure 3, prior to initiation of construction. The project would include approximately 12,000 square feet of landscaping.

Construction is anticipated to start in spring 2021 and be completed in 18 months. Earthwork would consist of approximately 10,200 total cubic yards for cut and fill, with 753 cubic yards of net export soils.

Figure 4 Conceptual Site Plan

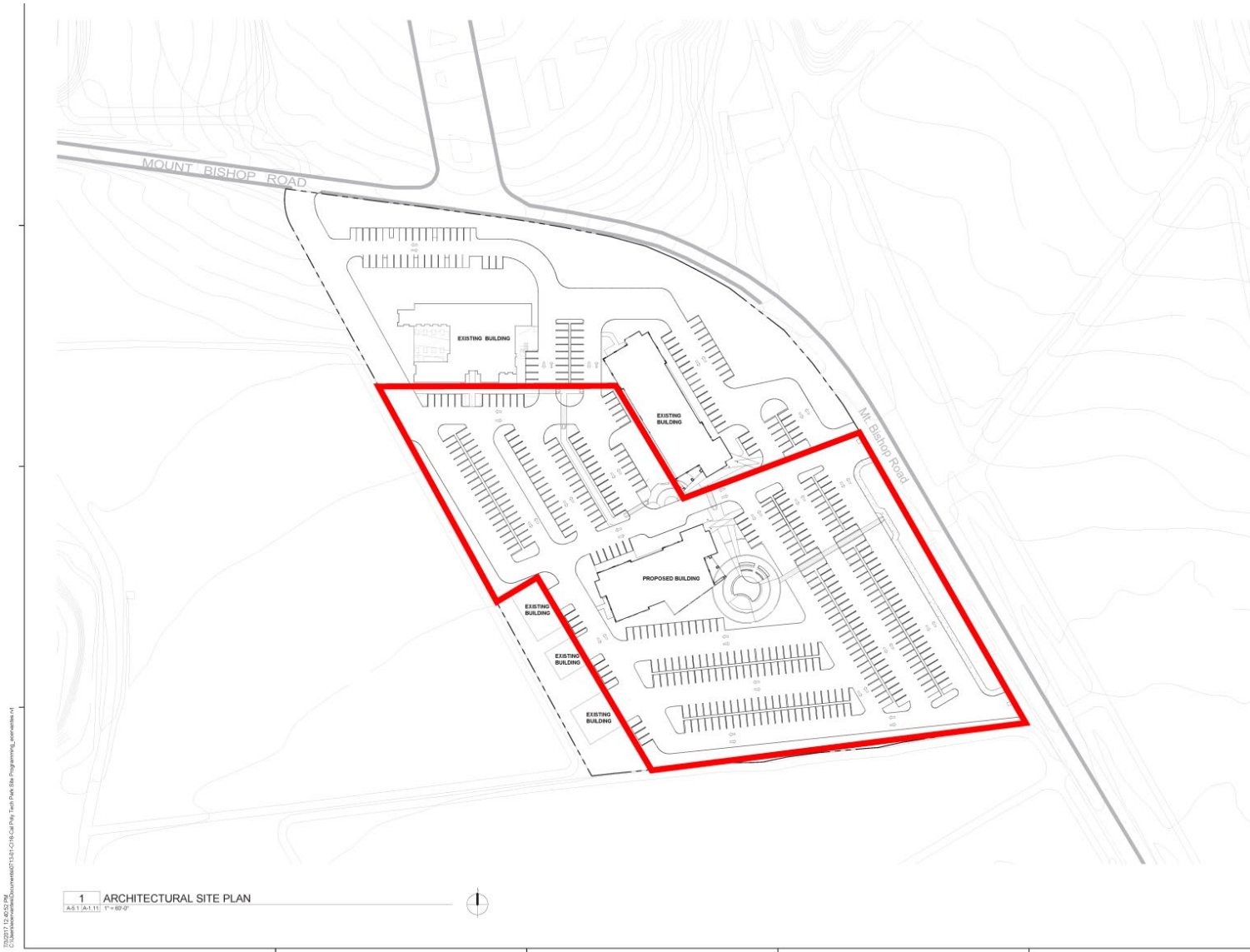


Figure 5 Conceptual Building Height

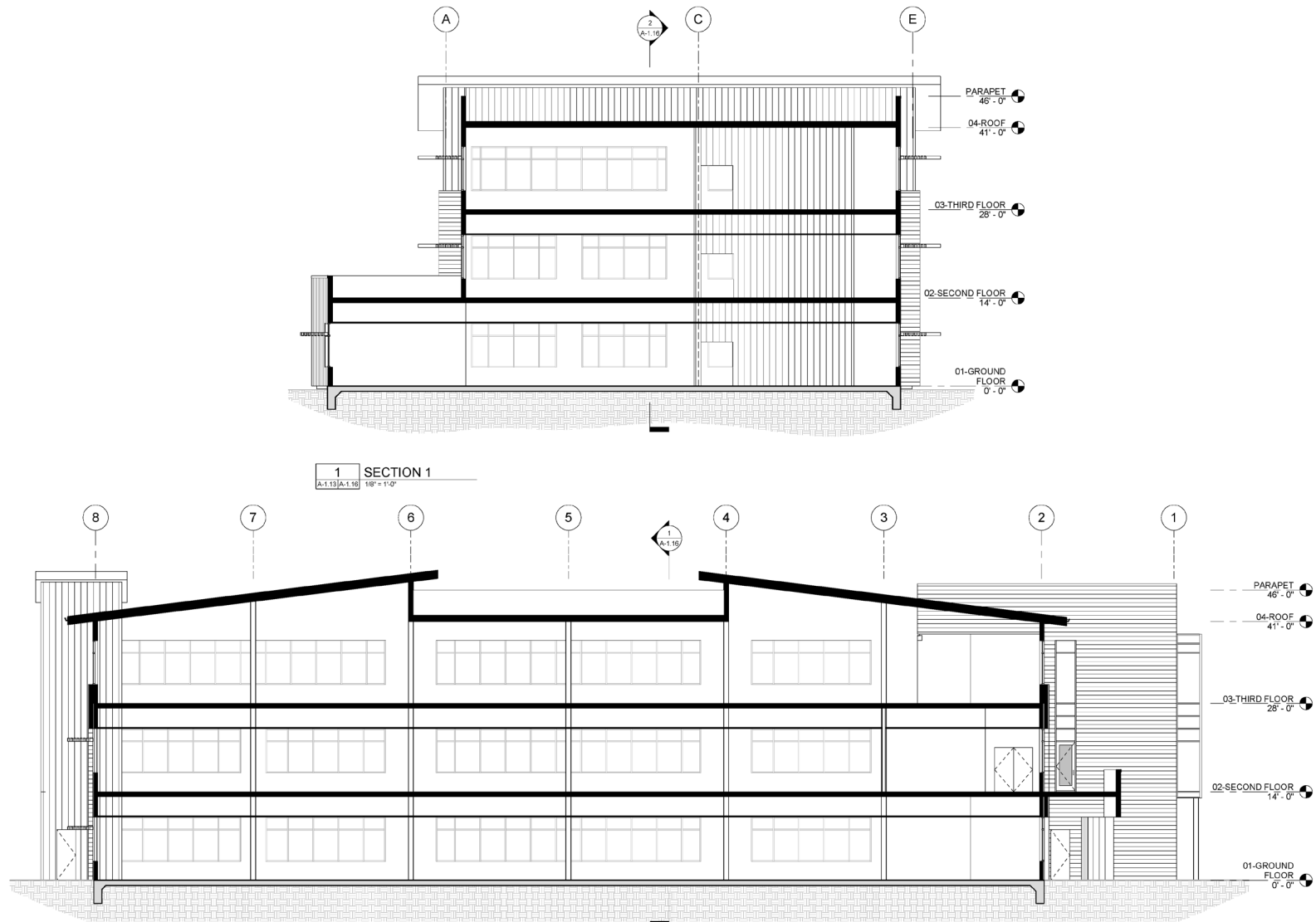


Figure 6 North and West Elevation Aerial View with Building Massing



2 NORTH ELEVATION
JA-1.14 1/8" = 1'-0"



4 WEST ELEVATION
JA-1.14 1/8" = 1'-0"

The project would require a Minor Master Plan Amendment, but would not affect overall enrollment. The project square footage does not exceed the development potential identified in the 2001 Master Plan.

Utilities

The project would connect to existing electrical, water, and sewer mains service to the project site are all adjacent to the site or on Mount Bishop Road.

Stormwater Management

The site drainage design will comply with the post-construction stormwater management requirements of the State Water Resources Control Board Phase II Small MS4 Permit. The guidelines require that the project treat, infiltrate, and detain stormwater, to the extent feasible.

7. Other Public Agencies Whose Approval is Required

- San Luis Obispo County Air Pollution Control District
- Regional Water Quality Control Board

8. Permits and Approvals Required

Implementation of the project would require the following discretionary approvals by the California State University:

- Adopt this IS-MND
- Approve a campus master plan revision
- Approve schematic plans

9. 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 Technology Park Expansion Project, located in San Luis Obispo County, California. This IS/MND has been prepared in accordance with the California Environmental Quality Act ([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, CSU, will be responsible for the review and approval of the proposed project.

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Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” 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"/> Energy |
| <input checked="" type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

Determination

Based on 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 revisions to the project have been made by or agreed to by the project proponent. 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 “less than significant with mitigation incorporated” 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 potential 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.



Signature

Jeffrey Dumars

Printed Name

7/26/2018

Date

Associate Director
Environmental and Space
Planning

Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Except as provided in Public Resources Code Section 21099, would the project:

a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting

The Technology Park Expansion project site is located on the extended campus, along Mount Bishop road, and adjacent to modular buildings #50J, #50K, #50L and the existing Technology Park (#83). Views of the site are experienced by drivers primarily along Mount Bishop Road and by pedestrians using the adjacent buildings. The site currently is disturbed and contains a parking area, an open-air storage yard, trees, and landscaping (Figures 7 through 10).

The existing visual environment surrounding the project site is largely disturbed/developed, and is characterized by existing campus structures, storage, and parking. The site is not located in a Campus Master Plan-designated scenic vista or along a designated scenic highway. Existing lighting sources in the project vicinity include structure lighting, campus security lighting, and parking lot lighting.

Figure 7 Project Site Looking North



Figure 8 Project Site Looking East



Figure 9 Project Site Looking South



Figure 10 Project Site Looking West from Mount Bishop Road



a. *Would the project have a substantial adverse effect on a scenic vista?*

No scenic vistas are located in the proposed project area, according to the 2001 Campus Master Plan and Environmental Impact Report (Cal Poly 2001). Therefore, the project would not have a substantial adverse effect on a scenic vista. No impact to scenic vistas would occur because of the project.

NO IMPACT

b. *Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

State Route (SR) 1, between San Luis Obispo and the northern San Luis Obispo County boundary line, is an Officially Designated State Scenic Highway (California Department of Transportation 2010). SR 1 is located approximately 0.3 mile west of the project site, but existing vegetation and topography block views of the location and the project, when constructed, would not be visible from the highway. Therefore, the project is not in the view corridor of any officially designated state scenic highway. Therefore, no impact to scenic highways would occur because of this project.

NO IMPACT

c. *Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The project would involve the removal of existing parking, storage yard, and landscaping, and construction of a three-story, 30,000-GSF Technology Park Expansion building with new landscaping. The 2001 Campus Master Plan proposes a campus interior that remains roughly the same in terms of height and mass to that of surrounding structures, and promotes visual continuity. At three stories tall and 30,000 GSF in size, the project would be visually compatible with the adjacent existing Technology Park building and would not result in a significant impact to the visual character of the campus. Approximately 20 ornamental trees and a minimal amount of landscaping would be removed during construction. The project would include new landscaping throughout the project site that would be consistent with the existing visual character of the site. As such, impacts would be less than significant.

During construction, potential aesthetic impacts would occur because of stockpiling and construction equipment on the project site. However, these potential impacts would be temporary and cease upon completion of construction.

Overall, the project would not degrade the existing visual character or quality of the site. Impacts on visual character and quality would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

Potential increased sources of light and glare include operational lighting, interior and exterior security lighting associated with the Technology Park Expansion building, and reflective building components, such as windows that could produce glare. Although the project is located on a developed area of campus, adjacent to existing structures that produce light and glare, it would

result in new sources of potential lighting and glare impacts associated with the proposed structures. These light and glare sources could adversely affect day or nighttime views and would be potentially significant.

Mitigation Measure

The following mitigation measure in accordance with the 2001 Campus Master Plan EIR would be required to reduce light and glare impacts to a less than significant level.

AES-1 Lighting and Glare Minimization

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).

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on 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 type="checkbox"/>	<input checked="" 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 or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

A substantial portion of the University’s land holdings are devoted to agriculture. The University has extensive livestock operations, ranches, and cultivated croplands including vineyards, row crops, and orchards. It also has more intensive agricultural facilities such as feedlots. Agricultural operations are located to the west, south, and east of project site. The project is designated as Urban and Built-up Land in the California Department of Conservation’s Farmland Mapping and Monitoring Program, while the surrounding properties to the west, south, and east are designated as Prime Farmland. Neither the project site nor surrounding areas contain forest land, timberland, or Timberland Production areas (as defined in the Public Resources Codes 12220 (g), 4526, or 51104 (g)).

- a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*
- c. *Would the project 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))?*
- d. *Result in the loss of forest land or conversion of forest land to non-forest use?*
- e. *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?*

The project site lies within the Operation land use designation of the Cal Poly campus (Cal Poly 2001). The project site does not contain any agricultural resources, land identified for potential agricultural production, lands designated as or zoned for agricultural use, or lands under a Williamson Act contract. Although the properties to the west, south, and east of the project site are designated as Prime Farmland, the project site itself is designated by the California Department of Conservation's Farmland Mapping and Monitoring Program as Urban and Built-Up Land and includes existing campus structures (California Department of Conservation 2016). As such, the project would not alter the existing environment such that it could result in the conversion of agricultural land. Furthermore, no timberland land exists on the project site. Therefore, no impact to agricultural resources or forest land would occur as a result of the project.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

The project site is located in the South Central Coast Air Basin (SCCAB) 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. SLOCAPCD monitors air pollutant levels to assure that air quality standards are met, and if they are not met, it develops strategies to meet the standards. Depending on whether the standards are met or exceeded, the air basin is classified as being in “attainment” or as “non-attainment.” SLOCAPCD is in non-attainment for the 24-hour state standard for particulate matter (PM₁₀) and the eight-hour state standard for ozone (O₃) (SLOCAPCD 2015).

Agricultural operations, vehicle dust, grading, and dust produced by high winds are the major sources of PM₁₀ in the SCCAB. Additional sources of particulate pollution include diesel exhaust; mineral extraction and production; combustion products from industry and motor vehicles; smoke from open burning; paved and unpaved roads; condensation of gaseous pollutants into liquid or solid particles; and wind-blown dust from soils disturbed by demolition and construction, agricultural operations, off-road vehicle recreation, and other activities. Ozone is a secondary pollutant not produced directly by a source; rather it forms from a reaction between nitrogen oxides (NO_x) and reactive organic gases (ROG) in the presence of sunlight. Reductions in ozone concentrations depend on reducing the amount of these precursors. In the SCCAB, the major sources of ROGs are motor vehicles, organic solvents, the petroleum industry, and pesticides. The major sources of NO_x are motor vehicles, public utility power generation, and fuel combustion by various industrial sources (SLOCAPCD 2015).

To comply with the California Clean Air Act, the SLOAPCD 2001 Clean Air Plan outlines the District's strategies to reduce ozone precursor emissions from a wide variety of stationary and mobile sources (SLOAPCD 2001).

Construction Emissions Thresholds

SLOAPCD has developed specific daily and quarterly numeric thresholds that apply to projects in the SCCAB. Daily thresholds are for projects that would be completed in less than one quarter of the calendar year (90 days). The SLOAPCD's quarterly construction thresholds apply to the project because construction would last for more than one quarter. Thresholds are based on guidance in the SLOAPCD's CEQA Air Quality Handbook (SLOAPCD 2012). These include the following:

ROG and NO_x Emissions

- **Quarterly – Tier 1.** For construction projects lasting more than one quarter, exceedance of the 2.5 tons per quarter threshold requires Standard Mitigation Measures and Best Available Control Technology (BACT) for construction equipment. If implementation of the Standard Mitigation and BACT measures cannot bring the project below the threshold, off-site mitigation may be necessary.
- **Quarterly – Tier 2.** For construction projects lasting more than one quarter, exceedance of the 6.3 tons per quarter threshold requires Standard Mitigation Measures, BACT, implementation of a Construction Activity Management Plan (CAMP), and off-site mitigation.

Diesel Particulate Matter (DPM) Emissions

- **Quarterly – Tier 1.** For construction projects lasting more than one quarter, exceedance of the 0.13 tons per quarter threshold requires Standard Mitigation Measures, BACT for construction equipment.
- **Quarterly – Tier 2.** For construction projects lasting more than one quarter, exceedance of the 0.32 ton per quarter threshold requires Standard Mitigation Measures, BACT, implementation of a CAMP, and off-site mitigation.

Fugitive Particulate Matter (PM₁₀), Dust Emissions

- **Quarterly.** Exceedance of the 2.5 tons per quarter threshold requires Fugitive PM₁₀ Mitigation Measures and may require the implementation of a CAMP.

Operational Emissions Thresholds

Table 2 summarizes SLOAPCD's long-term operational emission thresholds.

Table 2 SLOAPCD Operational Emissions Significance Thresholds

Pollutant	Daily Threshold (lbs/day)	Annual Threshold (tons/year)
ROG + NO _x (combined) ¹	25	25
Diesel Particulate Matter (DPM) ¹	1.25	–
Fugitive Particulate Matter (PM ₁₀), Dust	25	25
CO	550	–

¹SLOAPCD specifies that CalEEMod winter emission outputs be compared to operational thresholds for these pollutants.

Source: SLOAPCD 2012

Emissions for construction and operation of the project were estimated using the CalEEMod air quality modeling program (version 2016.3.2). Where project-specific information was not available, model default assumptions were used.

Sensitive Receptors

Certain population groups are considered more sensitive to air pollution than others. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases. Residential uses are considered sensitive to air pollution as well, because residents tend to be at home for extended periods, resulting in sustained exposure to any pollutants present. The nearest air quality sensitive receptors to the project site are single-family residences, located approximately 0.37 mile southwest of the project site.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

The applicable air quality plan is the SLOAPCD Clean Air Plan (SLOAPCD 2001). The plan projects air quality emissions and standard attainment goals based on growth rates in population and vehicle travel in San Luis Obispo County. The project involves construction of the new Technology Park Expansion building in the extended campus, but it would not affect overall enrollment. It is consistent with the development potential identified in the 2001 Campus Master Plan and analyzed in the 2001 Campus Master Plan EIR. The project would not conflict with or obstruct the Clean Air Plan because it does not include additional development growth or urban sprawl, nor would it result in a long-term increase in vehicle miles traveled. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project 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?

Construction Impacts

Construction activities would generate fugitive dust particles, ozone precursors, and diesel exhaust that could result in an increase in criteria pollutants and could contribute to the existing San Luis Obispo County nonattainment status for ozone and PM₁₀. Sensitive receptors near the project site include single-family residences approximately 0.37 mile southwest of the project site. Table 3 summarizes the estimated project emissions generated from construction activities, and provides

maximum quarterly emissions (see Appendix A for complete CalEEMod results), and compared to the applicable SLOAPCD construction emissions thresholds.

Table 3 Project Quarterly Construction Emissions

	ROG and NO _x (combined) ¹ (tons/quarter)	Fugitive PM ₁₀ (dust) (tons/quarter)	DPM ² (tons/quarter)
Project Construction Emissions	0.6	<0.1	<0.1
SLOAPCD Significance Threshold	2.5 (Tier 1)	2.5 (Tier 1)	0.13 (Tier 1)
Threshold Exceeded?	No	No	No

¹ The combined ROG and NO_x emissions were derived from the maximum quarterly emissions for “ROG + NO_x” from CalEEMod.

² The DPM estimations were derived from the “PM₁₀ Exhaust” and “PM_{2.5} exhaust” output from CalEEMod as recommended by SLOAPCD. This estimation represents a worst case scenario because it includes other PM₁₀ exhaust other than DPM. See Appendix A for CalEEMod software program output.

Note: Quarterly emissions for Fugitive PM₁₀ and DPM were calculated by dividing maximum annual construction emissions from CalEEMod by 4, since construction activities would extend for a duration exceeding 90 days, as recommended by SLOAPCD.

As shown in Table 3, the project would not exceed SLOAPCD quarterly construction emissions for ROG and NO_x, PM₁₀, or DPM. In accordance with the standards of the SLOAPCD CEQA Handbook, standard mitigation measures are required because the SCCAB is in non-attainment for PM₁₀. Construction impacts would be potentially significant unless mitigation is incorporated.

Operational Impacts

Operation of the project would result in ongoing emissions associated with natural gas use and area sources, such as landscaping, consumption of consumer products, and off gassing from architectural coatings. Table 4 shows the daily and annual operational emissions associated with the project (see Appendix A for complete CalEEMod results and assumptions), compared to the applicable SLOAPCD operational emissions thresholds.

Table 4 Project Operational Emissions

Source	ROG and NO _x	PM ₁₀	DPM ¹	CO
Total Daily Emissions (lbs/day)	1.2	0	<0.1	0.2
SLOAPCD Daily Threshold (lbs/day)	25	25	1.25	550
Threshold Exceeded?	No	No	No	No
Total Annual Emissions (tons/year)	0.2	0	<0.1	<0.1
SLOAPCD Annual Threshold (tons/year)	25	25	n/a	n/a
Threshold Exceeded?	No	No	n/a	n/a

¹ The DPM estimations were derived from the “PM₁₀ Exhaust” and “PM_{2.5} exhaust” output from CalEEMod as recommended by SLOAPCD. This estimation represents a worst case scenario because it includes other PM₁₀ exhaust other than DPM. CalEEMod – use winter operational emission data to compare to operational thresholds. See Appendix A for CalEEMod results.

Operational emissions from the project would not exceed applicable SLOAPCD thresholds, as shown in Table 4. Operational emissions associated with the project would be less than significant.

Mitigation Measure

The following mitigation measure would be required to reduce construction emissions to a less than significant level.

AQ-1 Fugitive Dust Control Measures

Construction projects shall implement the following dust control measures to reduce PM₁₀ emissions in accordance with SLOAPCD requirements.

- Reduce the amount of the disturbed area where possible
- Water trucks or sprinkler systems shall be used during construction in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency shall be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water shall be used whenever possible
- All dirt stock pile areas shall be sprayed daily as needed
- Permanent dust control measures identified in the approved project revegetation and landscape plans shall be implemented as soon as possible following completion of any soil disturbing activities
- Exposed ground areas planned to be reworked at dates greater than one month after initial grading shall be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established
- All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the SLOAPCD
- All roadways, driveways, sidewalks, etc. to be paved shall be completed as soon as possible after grading unless seeding or soil binders are used
- Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site
- All trucks hauling dirt, sand, soil, or other loose materials are to be covered or shall maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with California Vehicle Code Section 23114
- Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site
- Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads, with water sweepers using reclaimed water where feasible
- All of these fugitive dust mitigation measures shall be shown on grading and building plans
- The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20 percent opacity, and to prevent transport of dust off-site; duties shall include holidays and weekend periods when work may not be in progress, and the name and telephone number of such persons shall be provided to the SLOAPCD Compliance Division prior to the start of any grading, earthwork or demolition

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c. *Would the project expose sensitive receptors to substantial pollutant concentrations?*

There are no sensitive receptors within 1,000 feet of the project. The nearest sensitive receptors include single-family residences, located approximately 0.37 mile southwest of the project site. Therefore, impacts to sensitive receptors would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

The SLOAPCD CEQA Handbook identifies typical land uses with the potential to result in increases in odorous emissions (SLOAPCD 2012). None of the uses proposed under the project are listed as uses project that typically create objectionable odors. Therefore, they would not create objectionable odors affecting a substantial number of people. No impact related to objectionable odors would result.

NO IMPACT

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<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, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<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 native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" 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"/>

Setting

This region of San Luis Obispo County is in the Outer South Coast Ranges geographic subdivision of California. The Outer South Coast Ranges subdivision contains an array of vegetation community types that range from southern oak forest, blue-oak/foothill-pine wood land and chaparral to grasslands and agricultural/urbanized areas. The Outer South Coast Ranges subdivision is part of the larger South Coast Ranges geographic sub-region, which is a component of the even larger Central Western California physiographic area.

The project site is developed currently with a paved parking lot, landscaping, and a storage area surrounded by existing campus structures and development, parking lots, active agricultural fields, and Mount Bishop Road.

The California Natural Diversity Database (CNDDDB) was queried to obtain information regarding special status species documented within five miles of the project site (Appendix B) (California Department of Fish and Wildlife [CDFW] 2019). A number of the species identified in Appendix B do not have potential to occur within the project site due to the absence of suitable habitat.

The CNDDDB documents occurrences of California red-legged frog (federally threatened and CDFW Species of Special Concern) (CRLF; *Rana draytonii*) at three locations throughout the campus including the Swine Unit (#56), Brizzolara Creek, and Poly Canyon. Brizzolara Creek is the site with the nearest occurrence of the species, approximately 800 feet southwest of the site. CRLFs are not expected to occur on the project site because it is already developed and does not contain suitable habitat for this species, is surrounded by active agriculture and is not adjacent to suitable aquatic habitat. The project site is also located within federally designated critical habitat for the CRLF (U.S. Fish and Wildlife Service 2019). The CNDDDB records search identified 21 additional special status animals, 21 special status plant species, and three sensitive natural communities that have been documented within five miles of the project site (Appendix B). No special status plant species are expected to occur on the project site. Potentially suitable roosting habitat for the pallid bat (*Antrozous pallidus*) and western mastiff bat (*Emops perotis californicus*) occurs on and adjacent to the site in the form of trees and buildings (Appendix B).

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

No impacts to California Red-legged Frog are expected from the project as the site is already developed, does not contain suitable habitat for the species, is surrounded by active agriculture and is not adjacent to suitable aquatic habitat. In addition, considering the project site is developed, no loss or fragmentation of California Red-legged Frog designated critical habitat would occur due to implementation of the proposed project.

The project site does however contain suitable foraging habitat for pallid bat (*Antrozous pallidus*) and western mastiff bat (*Emops perotis californicus*) both designated by the CDFW as Species of Special Concern. These species could also utilize on-site and adjacent trees as day roosts as well as utilize adjacent buildings as day, night, or maternity roosts. Potential direct impacts to pallid bats and western mastiff bats on the project site include removal of day or night roosting habitat and harassment or injury if they are foraging in the project area or roosting adjacent to the site during project implementation. Indirect impacts to roosting bats could occur from noise and construction activities near roosting sites. No removal of potential maternity roosting locations is expected as

on-site buildings are not expected to be removed. Considering day or night roosting habitat in the area of impact is limited to a small number of ornamental trees, loss of these potential roosting locations is expected to be less than significant compared to the amount of available roosting habitat surrounding the project site (buildings, trees, and riparian corridors associated with Stenner and Brizzolara Creek). Mitigation measures would be required to reduce potential impacts to pallid bats and western mastiff bat individuals to a less than significant level.

Mitigation Measures

Adherence to the following mitigation measure would reduce impacts on roosting bats during construction to a less than significant level.

BIO-1 Pallid Bat and Western Mastiff Bat Impact Avoidance and Minimization

The following actions shall be undertaken to avoid and minimize potential impacts to pallid bats and western mastiff bats with the goal of no net loss of the species.

- Prior to issuance of grading permits, a qualified biologist shall conduct an emergence survey of existing structures and trees within and adjacent to the project site to determine if roosting bats are present. If a colony of bats is found roosting, further surveys shall be conducted sufficient to determine the species present and the type of roost (day, night, maternity, etc.). If pallid bats or western mastiff bats are determined to be roosting on or adjacent to the site the following shall be implemented as appropriate:
 - If a day or night roosting site is located on site or within 50 feet of the site, avoidance buffers shall be established/developed as determined by a qualified biologist dependent upon the species as well as the location of the roost in relation to the type of project activities occurring. If the day or night roost is within the area of impact, and the bats are not part of an active maternity colony, exclusion measures may be implemented, in close coordination with a qualified biologist and CDFW. A plan shall be developed that includes the methodology for excluding roosting bats.
 - If an active maternity roost for these species is found in the buildings on site or within 100-feet of the site, an avoidance buffer shall be established as determined by a qualified biologist. No construction activities (including parking and staging) shall be permitted within the avoidance buffer during the breeding season (typically April through August).
- To avoid impacts to foraging bats, construction shall be limited to daylight hours.

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- b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

The project site is disturbed and surrounded by existing campus structures and parking. It does not contain any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or U.S. Fish and Wildlife Service. There would be no impact to any riparian habitat or other sensitive natural community from the project.

NO IMPACT

- c. *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

The project site is disturbed and surrounded by existing campus structures and parking. It does not contain federally protected wetlands as defined by Section 404 of the Clean Water Act and therefore would not have a substantial adverse effect on such resources. There would be no impact to federally protected wetlands.

NO IMPACT

- d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

The project site is disturbed and surrounded by existing campus structures and parking. The site does not provide suitable habitat for wildlife and the surrounding uses would act as barriers to wildlife movement. However, trees and buildings on the site may support nesting birds protected under the Migratory Bird Treaty Act as well as California Fish and Game Code sections 3503, 3503.5, and 3513 which prohibits take, possession, or destruction of native birds, nests, and eggs. Section 3503.5 of the California Fish and Game Code also protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs.

The removal of approximately 20 trees and general construction activity may affect protected nesting birds. Indirect impacts to nesting birds may occur from construction activities near an active nest resulting in distress to adults and disruption of nesting behavior leading to abandonment or nest failure. Impacts to migratory bird species would be potentially significant unless mitigation is incorporated.

Mitigation Measure

Adherence to the following mitigation measure would reduce impacts on nesting birds during construction to a less than significant level.

BIO-2 Native/Breeding Native Bird Protection

To avoid impacts to nesting birds, including birds protected under the Migratory Bird Treaty Act and California Fish and Game Code, all initial ground-disturbing activities including tree removal should be limited to the period between September 16 and January 31 (i.e., outside the nesting season), if feasible. If initial site disturbance, grading, and vegetation removal cannot be conducted during this period, a pre-construction survey for active nests on the project site shall be conducted by a qualified biologist no more than two weeks prior to any construction activities. The survey area for nesting birds and raptor species shall include the disturbance footprint plus a 300-foot and 500-foot buffer, respectively. If active nests (nests with eggs or chicks) are located, a qualified biologist shall establish an appropriate avoidance buffer ranging from 50 to 500 feet based on the species, its biology, and the current and anticipated disturbance levels occurring near the nest. The objective of the buffer shall be to reduce disturbances to nesting birds. All buffers shall be marked using high-visibility flagging or fencing, and, unless approved by the qualified biologist, no construction activities shall be allowed within the buffers until the adults and young have fledged from the nest

and are no longer reliant on the nest site. The qualified biologist shall confirm that breeding/nesting is completed and that the young have fledged prior to the removal of the buffer.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The project would not conflict with University policies regarding biological resources. The University does not have an adopted tree preservation policy. Campus Master Plan policies that address biological resources call generally that new development is sited proximate to or within existing developed areas, and that it avoids sensitive areas such as creeks. The project would be located in or adjacent to existing developed areas and away from sensitive areas. Therefore, it is therefore consistent with guidance provided in the Campus Master Plan. No impact would result.

NO IMPACT

- f. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The project site is not within an area subject to a Habitat Conservation Plan or Natural Community Conservation Planning, or other local or regional conservation plans. No impact would occur.

NO IMPACT

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5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting

The analysis in this section is based on previous records searches conducted for Cal Poly. On December 15, 2016 and March 16, 2015, SWCA Environmental Consultants requested searches of the California Historical Resources Information System at the Central Coast Information Center at UC Santa Barbara. The search was conducted to identify any previously recorded cultural resources and previously conducted cultural resources studies on the campus and within a 0.5-mile radius. The records search included a review of the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic U.S. Geology Survey 7.5- and 15-minute quadrangle maps. The records search identified three previously recorded prehistoric archaeological sites (CA-SLO-669, CA-SLO-2090, and CA-SLO-2280) within the Master Plan area. One prehistoric archaeological site (CA-SLO-2090) is located within 0.5 mile of the project area (SWCA 2015, 2016).

Conejo Archeological Consultants performed a records search for the Cal Poly campus in September 2002 at the Central Coast Information Center at UC Santa Barbara. That search identified no known archaeological sites within 0.25 mile of the project site. However, the records search did identify two prehistoric sites (CA-SLO-1808 and CA-SLO-2090) within 0.5 mile of the project site (Conejo Archeological Consultants 2002).

A Phase I survey of the project site was not performed due to the previous disturbance of the soil surface.

- a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

The site is developed with a parking lot, storage yard, and landscaping. No historic-period structures or historic resources, including prehistoric or historic archaeological sites exist on site. No impact to historical resources would result from the project.

NO IMPACT

- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

The project area was occupied historically by the northernmost subdivision of the Obispeño Chumash, with the Salinan bordering to the north. However, the precise location of the boundary between the Chumashan-speaking Obispeño Chumash and their northern neighbors, the Hokan-speaking Playanos Salinan, is currently the subject of debate. The project site has been previously disturbed and is developed with a parking lot, storage yard, and landscaping. There are no known or suspected archaeological resources within the project area based on documentation and records searches. Though unlikely, in the event of an inadvertent discovery, mitigation is required to ensure potential impacts to unknown archaeological resources are reduced to less than significant.

Mitigation Measure

The following mitigation measure is required to reduce potential impacts to unknown archaeological resources.

CUL-1 Treatment of Unknown Archaeological Resources

In the event that 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 mitigated appropriately, work in the area may resume. A local Native American representative shall monitor any mitigation work associated with prehistoric cultural material.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- c. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

No known burials are located on the project site. In the unlikely event that human remains are unearthed, the University and contractor will comply with State Health and Safety Code Section 7050.5, which requires that no further disturbance shall occur until the County of San Luis Obispo Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the human remains are determined to be Native American, the County Coroner will notify the Native American

Heritage Commission within 24 hours, which will determine and notify a Most Likely Descendant, a representative of whom shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Impacts would be less than significant through compliance with existing state law.

LESS THAN SIGNIFICANT IMPACT

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6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting

Electric service to the Cal Poly campus consists of a single service from Pacific Gas & Electric (PG&E). The service operates at 70 kilovolts (kV) and the campus is metered at this voltage. Most of the electricity used on campus is for lighting and HVAC (Heating, Ventilation, and Air Conditioning). Cal Poly purchases approximately 92 percent of its electricity needs from PG&E, and generates the other 8 percent on campus from a combination of solar photovoltaic (PV) and cogeneration. Cal Poly has implemented numerous energy conservation projects to reduce electrical usage, including fluorescent lighting retrofits, occupancy sensors, HVAC equipment upgrades, variable frequency drivers for pumps and fans, and installation of digital energy management systems. PG&E’s 2015 power mix included 30 percent qualified renewables (biomass, geothermal, small hydro, solar PV, and wind), as defined by California’s Renewable Portfolio Standard, 25 percent natural gas, 23 percent nuclear, 6 percent large hydro, and 17 percent unspecified (Cal Poly 2016).

Natural gas is supplied to the campus by the Southern California Gas Company (SoCalGas) at four locations throughout campus, each having a SoCalGas meter. The metering station at the outbuilding near Lepino Foods Dairy Innovation Institute currently serves the existing Technology Park, and would serve the project.

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Construction of the project would result in short-term consumption of energy by construction equipment and related processes. Energy use during construction would be primarily from fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. The California Green Building Standards Code includes specific requirements related to recycling, construction materials, and energy efficiency standards that would apply to construction of the project to minimize wasteful, inefficient, and unnecessary energy consumption. California Green Building Standards Code mandatory measures for nonresidential buildings that would reduce

project energy demand include weather-resistant exterior walls, designated recycling areas for solid waste disposal, and HVAC air filters with a Minimum Efficiency Reporting Value of 8. Minimum standards for lighting efficiency are also established.

Energy demand from project operation would include the use of a 30,000-GSF Technology Park Expansion building, as well as fuel from vehicle trips and electricity for lighting. However, compliance with the California Green Building Standards Code would ensure that modern energy efficiency standards are met for the project's energy-demanding components. Furthermore, siting the building in proximity to nearby campus structures would result in efficient pooled energy use for lighting, grid connection, and vehicle trips. Compliance with the California Green Building Standards Code would prevent wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

By Governor's Executive Order S-20-04, Cal Poly and all state agencies are mandated to purchase energy star rated equipment and appliances whenever possible. Cal Poly requires Energy Star certification for all computers, monitors, printers, copiers, refrigerators, and other appliances and equipment.

In May 2014, the California State University (CSU) Board of Trustees adopted the CSU system-wide Sustainability Policy, which aims to further reduce the environmental impact of construction and operation of buildings and to integrate sustainability across the curriculum. The CSU Sustainability Policy established goals including but not limited to reducing GHG emissions, increasing on-site energy generation, reducing water consumption, and promoting use of alternative fuels and transportation programs. Compliance with state regulations, in addition to recommendations set forth in the CSU Sustainability Policy, would ensure impacts remain less than significant.

LESS THAN SIGNIFICANT IMPACT

7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. 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"/>
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 offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 direct or indirect risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>
f. 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"/>

Setting

The project site is located within the Santa Lucia Range of the Coast Ranges Geomorphic Province of California. The San Luis Obispo region is primarily underlain by Jurassic-era rocks of the Franciscan complex. The project site is located in a seismically active region that includes several active earthquake faults of local and regional significance. There are no known fault lines on the site or in the immediate vicinity. The closest active fault to the site is the Los Osos Fault, which lies approximately four miles from the project site. The project site is situated close to several other faults in the area including the Cambria, West Huasna/Oceanic Fault, Nacimiento, Rinconada, and Edna faults (Cal Poly San Luis Obispo 2001). Based on the 2001 Campus Master Plan, the project site is not located in a geologically hazardous area or an area of known paleontological sensitivity.

a.1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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?

According to the Official Maps of Earthquake Fault Zones delineated by the California Geological Survey, San Luis Obispo Quadrangle map, the project site is not located in an earthquake fault zone (Alquist-Priolo Special Studies Zones) for surface fault rupture (California Geological Survey 1990). No active faults are located on the project site or the Cal Poly campus; therefore, impacts related to surface rupture would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Due to the proposed project site's proximity to known faults, seismic ground shaking (i.e., ground acceleration) could adversely affect the project. However, all new building design projects are mandated to be consistent with the California Building Code and the CSU Seismic Policy. The California Building Code (California Code of Regulations, Title 24) requires various measures, such as reinforced materials and appropriate building anchorage, of all construction in California to account for hazards from seismic shaking. With mandatory incorporation of these design standards, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

The project site is located in an area of moderate liquefaction potential as mapped by the County of San Luis Obispo (San Luis Obispo County 2016). Therefore, impacts would be potentially significant, but mitigable.

Mitigation Measure

Adherence to the following mitigation measure would reduce impacts related to liquefaction to a less than significant level.

GEO-1 Design-Level Geotechnical Investigation

Prior to any project grading or construction activities, a design-level geotechnical engineering investigation shall be performed for the Technology Park Expansion building. Structures and foundations shall be in conformance with the California Building Code guidelines, and based on geotechnical design criteria provided by the project geotechnical engineer for the project site. A mitigation plan shall be prepared based on potential geological hazards impacts to the affected improvements determined during the design-level geotechnical engineering investigation for the project. Mitigation may involve subexcavation and recompaction of some portion of the alluvial soils underlying the improvements, and/or removal of expansive soils.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

While the Cal Poly campus contains areas of high landslide potential, they are located on the eastern portion of campus adjacent to the steep hillslopes that form the eastern boundary. The project site is not located in an area of landslide potential as mapped in the 2001 Campus Master Plan. There would be no impact with respect to landslides.

NO IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

Construction of the project would involve grading, trenching, and other ground-disturbing activities that could result in soil erosion or loss of topsoil. Upon completion of the project, structures, parking, and landscaping or revegetated areas would eventually cover any soils exposed during construction; thus, no long-term, new, erodible soils would be created because of the project.

During construction, the project would be required to implement erosion control measures stipulated in a Stormwater Pollution Prevention Plan (SWPPP) pursuant to the National Pollutant Discharge Elimination System requirements, which the project would be subject to as it would disturb more than 1.0 acre of land. Through compliance with these requirements, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project 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 offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

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

The project site would not be impacted by, or cause an increase in, landslide potential, as described in (a) above. The project site is located in an area of moderate liquefaction potential as mapped by the County of San Luis Obispo (2016). Furthermore, all soils on the Cal Poly campus are expansive to some degree. Therefore, impacts related to soil stability and expansive soils would be potentially significant, but mitigable. Implementation of Mitigation Measure GEO-1, described above, would be required to reduce impacts to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- e. *Would the project 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?*

The project would not require a septic system or any alternative wastewater disposal system. Therefore, no impact would occur.

NO IMPACT

- f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

The project site is currently disturbed and developed with a parking lot and storage yard. No known paleontological or unique geologic features exist on site (Conejo Archeological Consultants 2002). There would be no impact.

NO IMPACT

8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

Setting

Climate change is the observed increase in the average temperature of the earth’s atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. Climate change is the result of numerous, cumulative sources of greenhouse gases (GHG) that contribute to the “greenhouse effect,” a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the sun hits the earth’s surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions. This process is essential to support life on Earth because it warms the planet by approximately 60° Fahrenheit. Emissions from human activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat and contribute to an average increase in Earth’s temperature.

GHGs occur naturally and from human activities. Human activities that produce GHGs include fossil fuel burning (coal, oil, and natural gas for heating and electricity, gasoline and diesel for transportation); methane generated by landfill wastes and raising livestock; deforestation activities; and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆). Since 1750, estimated concentrations of CO₂, CH₄, and N₂O in the atmosphere have increased over by 36 percent, 148 percent, and 18 percent respectively, primarily due to human activity. Emissions of GHGs affect the atmosphere directly by changing its chemical composition. Changes to the land surface indirectly affect the atmosphere by changing the way in the Earth absorbs gases from the atmosphere. Potential impacts in California of global warming may include loss of snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (California Energy Commission 2009).

CEQA Guidelines provide regulatory direction for the analysis and mitigation of GHG emissions appearing in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

As discussed in Section 3.3, Air Quality, the project site is in the SCCAB under the jurisdiction of the SLOAPCD. The SLOAPCD has adopted a GHG emissions threshold of 1,150 metric tons of carbon dioxide equivalent (MT CO₂e) per year, which is applied in this analysis (SLOAPCD 2012).

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

Construction and operation of the project would generate GHG emissions. Construction 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 the new building (natural gas, purchased electricity) and water consumption. A substantial increase in vehicle emissions would not occur as the project would not result in a direct increase in vehicle trips or student enrollment.

Table 5 shows operational emissions, including those associated with area, energy, solid waste, and water. Table 5 also includes amortized construction emissions, consistent with SLOAPCD guidance that indicates that the short-term GHG emissions from the construction phase should be amortized over the life of the project (25 years for commercial projects). As shown in, the project is estimated to generate approximately 167 MT CO₂e of per year. The project’s operational GHG emissions combined with the amortized construction emissions would not exceed SLOAPCD’s GHG emissions threshold of 1,150 MT CO₂e per year. Therefore, the project’s impact on GHG emissions would be less than significant.

Table 5 Project GHG Emissions

Emission Source	Annual Emissions (MT CO₂e/year)
Area	0.0005
Energy	114.9
Solid Waste	1.14
Mobile	0.0
Water	43.4
Total Operational Emissions	159.4
Amortized Construction Emissions	7.2
Total	166.6

See Appendix A for CalEEMod worksheets.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

The 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 GHG emissions. Therefore, the project would not conflict with an applicable plan, policy, or regulation adopted for reducing GHG emissions. No impact would occur.

NO IMPACT

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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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 release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 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 that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. 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"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting

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 this end.

Review of environmental records included a database search from GeoTracker and EnviroStor databases maintained by the State Water Resources Control Board and Department of Toxic Substances Control.

Off-site Contamination

Four properties on the State Water Resources Control Board's GeoTracker website are located within 0.5-mile of the project site. Three of the properties are listed as historical Waste Discharge Requirement (WDR) sites, and include: The Cal Poly Beef Cattle Center to the northwest, the Cal Poly Swine Unit located to the north, and the Cal Poly Dairy Sciences Building to the north of the project site. The Cal Poly Winery is located to the southeast and is listed as an active WDR site since 2008 (SWRCB 2015). WDR sites are those operating under WDRs issued by SWRCB or another Regional Water Quality Control Board and do not necessarily indicate a release of hazardous materials. None of the properties included on these listings are expected to impact the project site.

On-site Contamination

The project site is not listed in the hazardous materials records search as having or storing potential hazardous contaminants. There have been past closed cases of hazardous materials releases on the campus grounds. However, the potential contamination is not anticipated from a closed site.

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The project may involve the transport, use, or disposal of small quantities of hazardous materials such as solvents and reagents, associated with the technology park. However, proper handling, transportation, and disposal in accordance with federal, state, and local laws and regulations would avoid significant exposure and hazards to people and the environment from potential hazardous materials contamination. No acutely hazardous materials would be used on site during project construction or operation. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Upset and accident conditions that may release hazardous materials into the environment are most likely during the construction phase of the project. Construction equipment, if damaged, can release fuel, oil, lubricants and other materials into the environment and expose workers and the campus population. The campus requires contractors to prepare, maintain, and implement management

plans for upset and accident condition on-site, including protocols for stop work, spill containment, notification and remediation. These measures are sufficient to reduce risks associated with accidents.

Small quantities of hazardous materials such as solvents and reagents, associated with the wet and dry labs would be used during project operations and could generate small amounts of hazardous waste. All chemicals would be stored within containment areas as required per the California Fire Code. Proper handling, transportation, and disposal in accordance with federal, state, and local laws and regulations would limit exposure and hazards to people and the environment from potential hazardous materials contamination. With compliance with these existing regulations, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The proposed project is not located on a site that has been included on a list of hazardous material sites. As described above, the project area site is located within 0.5 mile of sites listed on a database. However, because of the distance between these listings and the project site, as well as the specific conditions from each of the sites as described above, the listings are not anticipated to result in contamination of soil or groundwater at the project site. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

The project site is located approximately 5 miles from the San Luis Obispo County Regional Airport, and is outside the safety zones and flight path of the airport. Therefore, significant airport safety hazards are not anticipated. No impact would occur.

NO IMPACT

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Construction and operation of the project would be subject to State Fire Marshall inspection and approval prior to operation, which would ensure appropriate emergency access is provided to the new facility. Based on the location of the project, neither construction nor operation would affect emergency access to existing campus facilities. In the context of the overall campus, the project would be governed by the Cal Poly San Luis Obispo Campus Emergency Management Plan, which includes action response protocol in the event of a number of major disasters. Impacts would be less than significant (Cal Poly 2019).

LESS THAN SIGNIFICANT IMPACT

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

The combination of available fuels, weather, and topography found in a majority of the areas surrounding and on the outlying areas of the campus puts the University at considerable wildfire risk, according to the Hazard Profile Overview prepared by the University Police Department and Cal Poly Department of Emergency Management (Cal Poly 2017c). The majority of urban/wildland interface areas are located along the eastern portion of campus, adjacent to grassland areas (Cal Poly 2001). Although the project site is located away from this portion of campus, there is a potential risk for wildland fires due to the proximity of adjacent agricultural land and riparian vegetation associated with Stenner Creek. However, the project would comply with the state fire code; State Fire Marshal inspection and approval would ensure adequate emergency access is provided as part of project design. Moreover, in the context of the overall campus, the project would be governed by the Cal Poly San Luis Obispo Campus Emergency Management Plan, which includes action response protocol in the event of a major fire (Cal Poly 2019). Therefore, while the potential for wildland fires exists, impacts related to wildland fire hazards would be less than significant.

LESS THAN SIGNIFICANT IMPACT

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting

The Central Coast Regional Water Quality Control Board (RWQCB) is responsible for issuing construction stormwater permits on behalf of the State Water Resources Control Board (SWRCB).

The project site is not located in a flood hazard zone or a tsunami inundation area (Cal Poly 2001).

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

The project would involve the construction of the Technology Park Expansion building on a previously disturbed site in the extended campus. Existing developed campus and urban infrastructure borders the site, including paved sidewalks and streets, and developed storm drainage infrastructure. During construction, particularly during initial site clearance and excavation, the project would pose short-term risks associated with erosion, sediment transport, and off-site flooding. Construction equipment on-site would pose risk of release of fuels, lubricants, and other contaminants. In addition, construction of the project would require approximately 1.9 acres of ground disturbance, and soils loosened during excavation and grading could degrade water quality, if mobilized and transported off site via water flow.

Because construction of the project would disturb more than one acre, incorporation of an SWPPP and implementation of appropriate best management practices (BMP) 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 will identify which structural and nonstructural BMPs will be implemented, such as sandbag barriers, temporary desilting basins, gravel access roads, dust controls, and construction worker training. In addition, Cal Poly has developed a Water Quality Management Plan and a Storm Water Pollution Prevention Program for development on campus (Cal Poly 2005). The Water Quality Management Plan outlines BMPs for construction and operation, which would be applicable to the project. Design and implementation of such a plan, as required, would ensure that the project would not substantially degrade water quality or violate any water quality standards or waste discharge requirements.

Once operational, the primary source of stormwater pollutants would be pesticides, herbicides, sediment, or trash. The site drainage design will comply with the post-construction stormwater management requirements of the State Water Resources Control Board Phase II Small MS4 Permit. These guidelines require that the project treat, infiltrate, and detain stormwater to the extent feasible. Compliance with these requirements would ensure the project would not substantially degrade water quality or violate any water quality standards or waste discharge requirements once operational. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The project involves the removal of existing parking, a storage yard, and landscaping and construction of a new 30,000-GSF Technology Park Expansion building and landscaping. Due to the existing parking on-site, the amount of impervious surface would not increase. As such, the proposed project footprint would not be substantial such that the project would substantially

interfere with groundwater recharge. Dewatering or reduction of the groundwater table is not anticipated because of project implementation. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?*
- c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would 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?*

The project involves the removal of existing parking, a storage yard, and landscaping and construction of a new 30,000-GSF Technology Park Expansion building and landscaping. Due to the existing site being primarily hardscaped, the amount of impervious surface would not increase. In addition to compliance with an approved SWPPP, development and implementation of a site-specific drainage plan would be required to manage stormwater runoff from the impervious project areas. The project site drainage design would comply with the post-construction stormwater management requirements of the State Water Resources Control Board Phase II Small MS4 Permit, which require that the project treat, infiltrate, and detain stormwater to the extent feasible. Therefore, the development of the proposed project would not alter the existing drainage pattern or create a significant change in runoff conditions. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*

No streams or rivers are present on the project site. The project would not result in a net increase of impervious surfaces. Therefore, the project would not impede or redirect flows. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The proposed project is not located within the 100-year floodplain. The project site is located in Zone X, an area of minimal flood hazard (Federal Emergency Management Agency 2012). The project would, therefore, not expose people to risks from flooding, nor would the building or utilities impede or redirect flood flows. The Cal Poly campus is not located in a dam inundation area

and is not subject to flooding risks from dam failure. The campus is located inland from the coast and is not subject to tsunami hazards, nor is it located near any impounded bodies of water that could present hazards from seiches. No impacts would occur.

NO IMPACT

- e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Cal Poly has developed a Water Quality Management Plan and a SWPPP for development on campus (Cal Poly 2005). The Water Quality Management Plan outlines BMPs for construction and operation, which would be applicable to the project. Design and implementation of such a plan, as required, would ensure that the project would not substantially degrade water quality or violate any water quality standards or waste discharge requirements. As discussed under threshold item a, the proposed project would be required to comply with the California State Construction General Permit, which would minimize and avoid water quality impacts associated with soil erosion and stormwater runoff from the project site. Implementation of the proposed project would not violate water quality objectives for beneficial uses near the project site or exceed Total Maximum Daily Loads. Impacts related to conflicts with the water quality control plan would be less than significant

LESS THAN SIGNIFICANT IMPACT

11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project physically divide an established community?*
- b. *Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

The project site is located on the extended campus and would not generate on-campus growth with the potential to affect adjacent land uses. The project would not physically divide an established community, nor would it conflict with any land use plans or policies adopted for the purpose of avoiding or mitigating an environmental effect or any habitat conservation plans. The project would require a revision to the 2001 Campus Master Plan, but would not affect overall enrollment or exceed the capacity identified in the existing 2001 Campus Master Plan. The project would not conflict with any of the plan’s policies related to avoiding or mitigating an environmental impact. No impact would occur.

NO IMPACT

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12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<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"/>

- a. Would the project 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?*
- b. Would the project 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?*

The project area is not used or otherwise identified for mineral resource extraction (San Luis Obispo County 2016). No impact to mineral resources is anticipated.

NO IMPACT

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

The nearest noise-sensitive receptor to the project site is the existing Technology Park located approximately 75 feet from the proposed construction activity. Although the proposed building would be located over 200 feet from the existing Technology Park, a distance of 75 feet was conservatively used in this analysis to account for potential noise impacts throughout the three-acre site.

Cal Poly has not adopted specific numerical thresholds for groundborne vibration impacts. Therefore, this analysis uses the Federal Transit Administration’s (FTA) vibration impact thresholds to determine whether groundborne vibration would be “excessive.” A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels, where many people find transit vibration at this level annoying. Consequently, the FTA recommends a 78 VdB threshold for occasional¹ vibration events affecting institutional buildings² such as schools.

Cal Poly has not established thresholds for construction noise exposure, and the University is not subject to County noise standards. Nonetheless, the County of San Luis Obispo standards exempt construction noise occurring between 7 a.m. and 9 p.m., Monday through Friday, and between

¹ The “occasional” vibration event threshold was chosen because the frequency of vibration events associated with construction is not yet known as part of the project schedule. However, vibration events would be short-term, temporary, and intermittent.

² It is assumed that no vibration -sensitive research occurs in adjacent buildings.

8 a.m. and 5 p.m. on Saturday or Sunday, and these standards were applied to this analysis (Section 23.06.042(d) of the County Code).

Cal Poly also has not adopted established thresholds for long-term noise exposure or generation on campus, but the 2001 Campus Master Plan and EIR threshold of long-term increases in noise levels greater than 3 dBA has been applied to this analysis.

- a. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

The project includes construction of the new Technology Park Expansion building in the extended campus, along Mount Bishop Road. The uses would be similar to academic and research uses in the existing Technology Park, and would not be considered a substantially noisier use than other academic structures or program-related uses on campus. Permanent impacts would be less than significant.

Construction of the project would involve the use of heavy construction equipment, such as a backhoe, graders, tractors, a crane, forklifts, welders, cement mixers, loaders, rollers, an air compressor, and a paving machine that would generate short-term, periodic noise. Noise levels related to project construction activities could affect facilities in the existing Technology Park.

Table 6 shows noise levels at a distance of 75 feet during each construction phase, as modeled by the Roadway Construction Noise Model. As shown, noise levels range from 70 to 81 dBA at the nearest sensitive receptors.

Table 6 Construction Noise Levels by Phase

Construction Phase	Equipment	Estimated Noise at 75 feet (dBA Leq)
Site Preparation	Grader, Dozer, Tractor/Backhoe	80
Grading	Backhoe, Dozer, Tractor/Backhoe	80
Building Construction	Crane, Lift, Backhoe, Grader, Generator, Welder	81
Architectural Coating	Compressor	70
Paving	Paver, Roller,, Mixer, Backhoe, Scarifier	81

Source: Appendix C

Based on the thresholds applied for the purposes of this analysis, construction noise would be exempt between 7 a.m. and 9 p.m. Monday through Friday, and between 8 a.m. and 5 p.m. on Saturday or Sunday. While construction noise during these hours would be exempt, due to the proximity of sensitive receptors, construction may still conflict with neighboring laboratories and office spaces. To reduce conflicts with neighboring land uses (laboratories), the following mitigation measure is required to reduce impacts to a less than significant level.

Mitigation Measure

NOI-1 Construction Noise

The following Cal Poly Standard Requirements shall be implemented during project construction (Cal Poly 2001).

- Maximum noise levels within 1,000 feet of any classroom, laboratory, residence, business, adjacent buildings, or other populated area; noise levels for trenchers, pavers, graders and trucks shall not exceed 90 dBA at 50 feet as measured under the noisiest operating conditions. For all other equipment, noise levels shall not exceed 85 dBA at 50 feet.
- Equipment: equip jackhammers with exhaust mufflers and steel muffling sleeves. Air compressors should be of a quiet type such as a “whisperized” compressor. Compressor hoods shall be closed while equipment is in operation. Use electrically powered rather than gasoline or diesel powered forklifts. Provide portable noise barriers around jack hammering, and barriers constructed of 3/4-inch plywood lined with 1-inch thick fiberglass on the work side.
- Operations: keep noisy equipment as far as possible from noise-sensitive site boundaries. Machines should not be left idling. Use electric power in lieu of internal combustion engine power wherever possible. Maintain equipment properly to reduce noise from excessive vibration, faulty mufflers, or other sources. All engines shall have properly functioning mufflers.
- Scheduling: schedule noisy operations to minimize their duration at any given location, and to minimize disruption to the adjoining users. Notify Cal Poly and the Architect in advance of performing work creating unusual noise and schedule such work at times mutually agreeable.
- Do not play music, televisions, and other similar items at construction site.
- When work occurs in or near occupied buildings, the Contractor is cautioned to keep noise associated with any activities to a minimum. If excessively noisy operations that disrupt academic activities are anticipated, they must be scheduled after normal work hours, as needed.
- A haul route plan shall be prepared for review and approval by the University that designates haul routes as far as possible from sensitive receptors.
- Stockpiling and vehicle staging areas shall be located as far as practical from occupied structures.
- Whenever practical, the noisiest construction operations shall be scheduled to occur together in the construction program to avoid continuous periods of noise generation.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Operation of the project would not result in the installation of any stationary equipment or long-term operational activities that would generate ground vibration. Heavy equipment would be required for site-preparation and construction of the proposed project, and ground-vibration impacts associated with the project would be limited to short-term construction activities with the potential to affect nearby sensitive receptors. The nearest noise-sensitive receptor is the existing Technology Park, located approximately 75 feet from the project boundary.

Table 7 identifies vibration velocity levels for the types of construction equipment that would operate at the project site during construction at a distance of 75 feet.

Table 7 Construction Vibration Levels

Equipment	Approximate VdB
	75 feet
Loaded Trucks	71
Jackhammer	65
Bulldozer (small)	43

As illustrated in Table 7, vibration levels could reach approximately 71 VdB at the nearest sensitive receptor. These vibration levels would not exceed the groundborne vibration threshold level of 78 VdB for occasional vibration at institutional (university) buildings. This impact is less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

The project area site is located approximately five miles north of the San Luis Obispo County Regional Airport, and the proposed project does not involve the development of new noise-sensitive uses. Thus, no impacts relating to aircraft noise are anticipated.

NO IMPACT

14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Induce substantial unplanned 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 people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The project includes the construction of a 30,000-GSF Technology Park Expansion building. The project would not affect overall enrollment and would not result in extension of roads or other infrastructure to a new location. Therefore, the project would not induce substantial population growth in an area, either directly or indirectly. No impact would result.

NO IMPACT

- b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The project includes the construction of a 30,000-GSF Technology Park Expansion building. The project would not displace existing housing or people necessitating the construction of replacement housing elsewhere. No impact would result.

NO IMPACT

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15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1 Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2 Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3 Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4 Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5 Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Cal Poly is situated in an unincorporated area San Luis Obispo County, immediately adjacent to the city of San Luis Obispo. Cal Poly is in the jurisdiction and service area of the County of San Luis Obispo Fire Department (County Fire) and the California Department of Forestry and Fire Protection (CALFIRE) for fire services. Under the laws of the State of California, only the state and incorporated cities are obligated to provide fire protection services. The state provides wildland and watershed fire protection in State Responsibility Areas; it does not provide structure protection, rescue and emergency service, or hazardous materials response. Counties provide fire services at their discretion, and service levels vary from county to county. The County of San Luis Obispo chose to protect residents and property in its jurisdiction by creating the San Luis Obispo County Fire Department in partnership with CALFIRE. The partnering and consolidation between County Fire and CALFIRE is documented through contractual agreements that direct CALFIRE/County Fire to provide fire protection and emergency response services and shared funding for the provision of such services. Because Cal Poly is located in an unincorporated County area and a State Responsibility Area, CALFIRE and County Fire have jurisdictional fire protection obligations over the campus. The

closest CALFIRE/County Fire station is Station 12, located on Cal Poly property at 635 North Santa Rosa Street and across SR 1 from the campus.

The City has a robust fire department, which is designed to address fire, rescue, and emergency services needed for the predominantly urban/sub-urban land use patterns in city limits, and on the Cal Poly campus (pursuant to written agreements with the City). The City has four fire stations staffed with 40-plus firefighters. The closest to Cal Poly's campus is Fire Station 2, located at 132 North Chorro Street. It currently serves Cal Poly and the north section of the San Luis Obispo. The City and CALFIRE/County Fire have adopted an "automatic mutual aid" doctrine that provides for the closest fire engine to respond to a new emergency regardless of jurisdictional lines. This allows for enhanced service without increasing the number of fire stations or firefighters as it utilizes existing resources regionally, rather than just within jurisdictional boundaries. The City and CALFIRE/County Fire have documented their automatic mutual aid agreement through an Operational Plan and Agreement for Automatic Aid dated January 30, 2012 ("Automatic Aid Agreement"). Through the Automatic Aid Agreement, the City serves as the primary first responder to the Cal Poly campus core, with support from CALFIRE/County Fire as needed. The Automatic Aid Agreement exists independent of any other agreement between Cal Poly and the City, and obligates the City Fire Department to provide fire and emergency response services to Cal Poly. In exchange, the City receives support from CALFIRE/County Fire for its more rural locations and/or where CALFIRE/County Fire is the closest responder.

Through an Agreement for Enhanced Emergency Services between Cal Poly, the City, the County, and CALFIRE, the University receives enhanced fire protection and emergency services for the campus. Pursuant to the terms of the Agreement for Enhanced Emergency Services, the Technology Park Expansion project will be designed to meet or exceed the standards of the California State Fire Marshal who has jurisdiction over state property. The Fire Marshal is responsible for enforcing compliance of buildings and operations with applicable fire and safety codes as well as fire safety design of facilities and supporting infrastructure. Under the Agreement for Enhanced Emergency Services, Cal Poly compensates the City for enhanced emergency services based on the primary factor that influences fire, medical, and rescue service delivery: campus residential population. The project would not alter enrollment; therefore, the total population served by the City would be unchanged. No new or physically altered fire department facilities are anticipated because of this project; therefore, no environmental impacts associated with the construction of new facilities would occur.

NO IMPACT

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The University police serve the campus and may call upon City and County of San Luis Obispo law enforcement for backup, as needed. The project would not alter enrollment; therefore, the total population served by University police would be unchanged. No new or physically altered police facilities are required because of this project; therefore, no environmental impacts associated with construction of new facilities are expected.

NO IMPACT

- a.3. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*
- a.4. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*
- a.5. *Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The project includes the construction of a 30,000-GSF Technology Park Expansion building. The project would not affect overall enrollment or increase population or populations of school-age children. Therefore, the project would not increase the demand for schools, parks, or other public facilities. No impacts would occur.

NO IMPACT

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16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project 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 type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project 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 type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*
- b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The project includes the construction of a 30,000-GSF Technology Park Expansion building. The project would not increase population and therefore would not increase the use of existing parks or recreational facilities. The project does not include recreational facilities. No impacts would occur.

NO IMPACT

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17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

The CSU Transportation Impact Study Manual provides guidance to help determine when a vehicle miles traveled (VMT) assessment is required. Numerous types of projects are considered to be VMT reducing, and would therefore not require an assessment. Such CSU projects include, but are not limited to, student services facilities, healthcare centers, and projects generating less than 110 vehicle trips per day (Fehr and Peers 2019).

- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

The project site does not currently include sidewalks or bike lanes. However, the project would provide bicycle parking spaces in compliance with the California Green Building Standards Code. Public transit provided by the City of San Luis Obispo Transit System is available approximately a quarter-mile southeast of the project site at Highland and Mount Bishop Road bus stop. The project would not involve construction or operational activities that would adversely affect public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities. No impact would occur.

NO IMPACT

- b. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

The project includes construction of the Technology Park Expansion building. Project construction would temporarily add trips to campus and city roadways in the project vicinity through the duration of construction activities, including haul trips, worker trips, material delivery trips, and heavy equipment trips. This minimal level of trip generation would not have an adverse effect on traffic operations or increase congestion on area roadways in the long-term. Therefore, potential impacts related to construction would be less than significant.

Once operational, the project would add employee trips to campus and nearby city roadways for the 100 to 150 individuals anticipated to work at the proposed Technology Park Expansion building.. However, 30 to 40 percent of the individuals working at the proposed Technology Park Expansion building are anticipated to already be on campus and would walk or bike to the facility (Cal Poly 2018). Conservatively assuming that 150 people would be employed and only 30 percent of them would already be on campus, the project would generate 105 new vehicle trips. Based on the CSU Transportation Impact Study Manual, projects generating less than 110 trips are screened from a VMT assessment due to their VMT-reducing nature (Fehr and Peers 2019). Furthermore, as discussed in checklist item (a) above, public transit is available approximately a quarter-mile southeast of the project site at the Highland and Mount Bishop bus stop. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*
- d. *Would the project result in inadequate emergency access?*

The proposed project would not alter or increase air traffic, create any traffic hazards, conflict with emergency access patterns, or conflict with any adopted transportation plans or policies. The project would not permanently change vehicular, transit, pedestrian, or bicycle access to Cal Poly or other parcels. The project would not introduce incompatible uses or hazards related to a roadway design feature. No impacts would occur.

NO IMPACT

18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <p>a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

To date, no Native American tribes that are culturally and geographically affiliated with the project site have requested government to government consultation formally with Cal Poly as required under AB 52. As discussed in the Cultural Resources section, SWCA conducted records searches covering the project area. The search was conducted to identify any previously recorded cultural resources and previously conducted cultural resources studies within the campus and a 0.5-mile radius around it. The records search identified three previously recorded prehistoric archaeological sites (CA-SLO-669, CA-SLO-2090, and CA-SLO-2280) within the Master Plan area.

In addition, Conejo Archeological Consultants performed a records search for the Cal Poly campus in September 2002 at the CCIC at UC Santa Barbara. Their search identified no known archaeological sites within 0.25-mile of the project site. However, the records search did identify two prehistoric sites (CA-SLO-1808 and CA-SLO-2090) within 0.5-mile of the project site (Conejo Archeological Consultants 2002). No tribal cultural resources have been identified in the project boundary and Cal Poly has satisfied the requirements of AB 52 for the project. Therefore, the proposed project would not result in a substantial adverse change to a tribal cultural resource. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting

Whale Rock Reservoir is the primary source of water supply for the campus. Whale Rock Reservoir's safe annual yield is estimated at 959 acre-feet per year (AFY). Non-agricultural water use from Whale Rock Reservoir is estimated at 597 AFY and agricultural water use is limited to 320 AFY; thus, Whale Rock Reservoir water use is 917 AFY, which results in 42 AFY of available water (Cal Poly 2018). In addition, the recently approved Science and Agriculture Teaching and Research Complex project would use approximately 2.3 AFY of the 42 AFY of available water (Cal Poly 2018). As such, there is 39.7 AFY of available water.

Water from Whale Rock reservoir is treated at the Stenner Canyon water treatment facility, owned and operated by the City of San Luis Obispo. Peak treatment capacity has been expanded recently to 16 million gallons per day (Cal Poly 2001). Based on an existing contract with the City of San Luis Obispo dated May 1, 2007, Cal Poly has a capacity interest in the city's water treatment facility calculated as average demand equivalent to 1,000 acre feet as calculated on an annual basis. Cal Poly's current potable water use is estimated at 531 AFY, resulting in 469 AFY of available water treatment capacity (Cal Poly 2018).

Cal Poly's existing storm drains operate close to capacity during high rains, and existing storm drains feed into Brizzolara and Stenner creeks (Cal Poly 2001).

The City of San Luis Obispo provides wastewater collection and treatment services to the University through a contractual agreement dated May 1, 2007. Based on this agreement, Cal Poly has a capacity interest in the City's wastewater recovery facility of 0.471 million gallons per day (MGD) dry weather flow. Cal Poly's baseline dry weather (October) monthly average daily flow has averaged 0.312 MGD between 2014 to 2017 with a maximum of 0.345 MGD in October 2017. The entire campus ties into a sewer main located near the intersection of California Street and Foothill Boulevard.

Cal Poly operates an integrated waste management program that includes source use reduction, recycling, composting of food waste, green waste, and manure, resale of scrap metal and surplus equipment, and zero waste event catering. Cal Poly contracts with San Luis Garbage for collection of solid waste and recycling. Facility Services provides recycling containers to faculty, staff, and students, and Custodial Services and the campus Recycling Coordinator collect the waste. Cal Poly has a 50 percent diversion goal for solid waste. The University has met or exceeded that goal since 2003, with over 86 percent diversion achieved in 2017. In 2017, Cal Poly's solid waste generation rate was 0.55 tons of solid waste per person. Paper, cardboard, aluminum, glass, and plastics are collected and sent to recycling facilities. Campus Dining sends food waste to a composting operation. The University also encourages recycling through its procurement policies, stating that to the extent possible, all products must be recyclable or made from recycled materials (Cal Poly 2001).

Solid waste not diverted by the University is transported to the Cold Canyon Landfill. The landfill is located approximately 7 miles from San Luis Obispo. The landfill serves private entities and municipalities throughout San Luis Obispo County. The landfill has recently expanded and has a remaining capacity of 14,500,000 cubic yards out of a total capacity of 23,900,000 cubic yards (California Department of Resources, Recycling, and Recovery 2018).

- a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

The project would include a new on-site water lateral for potable drinking water that would connect to existing water mains in Mount Bishop Road. It would also include a new sanitary sewer line that would connect to the existing sewer main located in Mount Bishop Road. No off-site improvements would be necessary and the potential environmental effects associated with on-site improvements are evaluated throughout this MND. There is sufficient water and wastewater capacity to serve the project; therefore, the construction of new water or wastewater treatment facilities or expansion of existing facilities would not occur. Impacts would be less than significant.

New stormwater infrastructure would be installed throughout the project site similar to existing on-site infrastructure and stormwater facilities associated with other buildings on campus. Proposed stormwater facilities would be designed to capture and convey anticipated stormwater runoff for the site. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

The Technology Park Expansion water demand is estimated at 0.38 AFY (Cal Poly 2018). As stated above, Whale Rock Reservoir has 39.7 AFY of available capacity, and thus would be able to meet project demand. Additionally, Cal Poly's unused allotment of water treated at the City's water treatment plant is 469 AFY, which is more than sufficient to meet the project's 0.38 AFY water demand. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project 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?*

The Central Coast Regional Water Quality Control Board regulates wastewater treatment for the City of San Luis Obispo and Cal Poly. Wastewater for the project is estimated at 0.38 AFY (or approximately 339 gallons per day). This wastewater would be discharged via a new on-site sewer line, connecting to an existing campus sewer main located in Mount Bishop Road and delivered to the City of San Luis Obispo's wastewater treatment facility. No off-site improvements would be necessary. There is at least 0.124 MGD (or 123,948 gallons per day) of unused capacity in Cal Poly's share of the City's water treatment facility's capacity, including the anticipated wastewater needs of the approved Science and Agriculture Teaching and Research Complex (Cal Poly 2018). Therefore, there is adequate capacity to treat the project's maximum wastewater generation rate of approximately 339 gallons per day and the project would not exceed wastewater treatment requirements. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The project includes the removal of existing parking and landscaping, and construction of the Technology Park Expansion. Earthwork would consist of 753 cubic yards of net export soils to be disposed offsite. Cold Canyon Landfill accepts construction waste (Cold Canyon Landfill 2018), and the waste associated with these activities would be transported to the landfill. As discussed above, the Cold Canyon Landfill has available capacity, and would be able to accommodate the project's construction waste. The project would be outfitted with traditional trash and recycling facilities. As the project 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 percent of the campus' non-hazardous solid waste is diverted to a licensed recycling facility.

Maintaining the existing diversion rate would ensure compliance with Assembly Bill 75, which requires all large state facilities to divert at least 50 percent of non-hazardous solid waste from landfills. The Cold Canyon landfill serves Cal Poly and was recently expanded; it has sufficient remaining capacity to continue to serve the campus (CalRecycle 2018). Therefore, a less-than-significant impact to landfills, solid waste policies, and programs would occur.

LESS THAN SIGNIFICANT IMPACT

20 Wildfire

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

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

The project site is designated Local Responsibility Area for fire protection responsibility, and is not in a very high fire hazard severity zone (VHFHSZ). Local responsibility areas with Very High fire hazard severity designation occur approximately one mile west of the project site (CALFIRE 2018).

As described in Section 17, *Transportation*, the project would not result in significant impacts to the circulation system. Therefore, the project would not substantially adversely affect emergency response or evacuation. Because the project is not in a VHFHSZ and would not adversely affect emergency response or evacuation, this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*
- c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

The project site is not in or near a state responsibility area or VHFHSZ. Development of the 30,000-GSF Technology Park Expansion building would not substantially change the existing fire hazards in the area. The project would include standard infrastructure, such as water and electricity, but would not require infrastructure associated with fire hazard prevention/response other than a water connection. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

As described above, the project site is not in or near a VHFHSZ or state responsibility area. The project site is relatively flat. As described in Section 7, *Geology and Soils*, and Section 10, *Hydrology and Water Quality*, there are not substantial hazards related to landslides or flooding near the project site. Therefore, impacts related to post-fire flooding or landslide risks would be less than significant.

LESS THAN SIGNIFICANT IMPACT

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Does the project:

- | | | | | |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|
| <p>a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <p>b. 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)?</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <p>c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

This document describes how the project would not have the potential to substantially reduce the habitat of a fish or wildlife species or cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, or reduce or restrict the range of a rare or endangered plant or animal. Based on implementation of mitigation for biological resources, to protect native birds, and cultural resources, to protect previously unknown resources, the project would not substantially reduce habitat, fish, or wildlife populations or adversely impact historic or prehistoric resources.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- 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)?*

Construction of the Technology Park Expansion project 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 less than significant level, and would not contribute to a cumulative impact when considered in combination with other projects that may occur on campus. The project would require a minor amendment to the 2001 Campus Master Plan. However, this project would not affect overall campus enrollment and is consistent with the development potential identified in the 2001 Master Plan. The project would not generate substantial growth or off-site vehicle trips that could impact the city’s circulation system, regional vehicle miles traveled, regional operation air contaminant emissions, GHG emissions standards, or noise standards, on a cumulative basis. 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.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

Project impacts related to GHG emissions, hazards and hazardous materials, and hydrology and water quality would be less than significant. Mitigation measures identified in this document would ensure impacts to air quality, geology and soils, and noise would be reduced below a level of significance. Therefore, with implementation of the required measures, no substantial adverse effects on human beings would occur because of the proposed project.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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List of Preparers

Rincon Consultants, Inc. prepared this IS-MND under contract to Cal Poly. Persons involved in data gathering analysis, project management, and quality control are listed below.

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Appendix A

CalEEMod Air Quality and Greenhouse Gas Emissions Estimates

Technology Park Expansion - South Central Coast Air Basin, Annual

Technology Park Expansion
South Central Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	30.00	1000sqft	1.90	30,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.9	Precipitation Freq (Days)	37
Climate Zone	4			Operational Year	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - From Project Description
- Construction Phase -
- Grading - Cal Poly Correspondence (2019) Project Description
- Vehicle Trips - From Project Description

Technology Park Expansion - South Central Coast Air Basin, Annual

Table Name	Column Name	Default Value	New Value
tblGrading	AcresOfGrading	1.50	1.90
tblGrading	MaterialExported	0.00	735.00
tblLandUse	LotAcreage	0.69	1.90
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	WD_TR	8.11	0.00

2.0 Emissions Summary

Technology Park Expansion - South Central Coast Air Basin, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2021	6-30-2021	0.3755	0.3755
2	7-1-2021	9-30-2021	0.5268	0.5268
3	10-1-2021	12-31-2021	0.5271	0.5271
4	1-1-2022	3-31-2022	0.6089	0.6089
		Highest	0.6089	0.6089

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1520	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004
Energy	4.2700e-003	0.0388	0.0326	2.3000e-004		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	114.3200	114.3200	4.0700e-003	1.4500e-003	114.8534
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.4628	0.0000	0.4628	0.0274	0.0000	1.1466
Water						0.0000	0.0000		0.0000	0.0000	4.6798	23.2196	27.8993	0.4817	0.0116	43.3888
Total	0.1562	0.0388	0.0329	2.3000e-004	0.0000	2.9500e-003	2.9500e-003	0.0000	2.9500e-003	2.9500e-003	5.1426	137.5401	142.6827	0.5131	0.0130	159.3894

Technology Park Expansion - South Central Coast Air Basin, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1520	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004
Energy	4.2700e-003	0.0388	0.0326	2.3000e-004		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	114.3200	114.3200	4.0700e-003	1.4500e-003	114.8534
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.4628	0.0000	0.4628	0.0274	0.0000	1.1466
Water						0.0000	0.0000		0.0000	0.0000	4.6798	23.2196	27.8993	0.4817	0.0116	43.3888
Total	0.1562	0.0388	0.0329	2.3000e-004	0.0000	2.9500e-003	2.9500e-003	0.0000	2.9500e-003	2.9500e-003	5.1426	137.5401	142.6827	0.5131	0.0130	159.3894

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Technology Park Expansion - South Central Coast Air Basin, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/29/2021	4/30/2021	5	2	
2	Grading	Grading	5/1/2021	5/6/2021	5	4	
3	Building Construction	Building Construction	5/7/2021	2/10/2022	5	200	
4	Paving	Paving	2/11/2022	2/24/2022	5	10	
5	Architectural Coating	Architectural Coating	2/25/2022	3/10/2022	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.9

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 45,000; Non-Residential Outdoor: 15,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Technology Park Expansion - South Central Coast Air Basin, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	92.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	10.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Technology Park Expansion - South Central Coast Air Basin, Annual

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5600e-003	0.0174	7.5600e-003	2.0000e-005		7.7000e-004	7.7000e-004		7.0000e-004	7.0000e-004	0.0000	1.5118	1.5118	4.9000e-004	0.0000	1.5241
Total	1.5600e-003	0.0174	7.5600e-003	2.0000e-005	5.8000e-003	7.7000e-004	6.5700e-003	2.9500e-003	7.0000e-004	3.6500e-003	0.0000	1.5118	1.5118	4.9000e-004	0.0000	1.5241

Technology Park Expansion - South Central Coast Air Basin, Annual

3.2 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.1000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0524	0.0524	0.0000	0.0000	0.0524
Total	3.0000e-005	2.0000e-005	2.1000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0524	0.0524	0.0000	0.0000	0.0524

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5600e-003	0.0174	7.5600e-003	2.0000e-005		7.7000e-004	7.7000e-004		7.0000e-004	7.0000e-004	0.0000	1.5118	1.5118	4.9000e-004	0.0000	1.5241
Total	1.5600e-003	0.0174	7.5600e-003	2.0000e-005	5.8000e-003	7.7000e-004	6.5700e-003	2.9500e-003	7.0000e-004	3.6500e-003	0.0000	1.5118	1.5118	4.9000e-004	0.0000	1.5241

Technology Park Expansion - South Central Coast Air Basin, Annual

3.2 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.1000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0524	0.0524	0.0000	0.0000	0.0524
Total	3.0000e-005	2.0000e-005	2.1000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0524	0.0524	0.0000	0.0000	0.0524

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0101	0.0000	0.0101	5.0800e-003	0.0000	5.0800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5800e-003	0.0287	0.0127	3.0000e-005		1.2800e-003	1.2800e-003		1.1700e-003	1.1700e-003	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968
Total	2.5800e-003	0.0287	0.0127	3.0000e-005	0.0101	1.2800e-003	0.0114	5.0800e-003	1.1700e-003	6.2500e-003	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968

Technology Park Expansion - South Central Coast Air Basin, Annual

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.4000e-004	0.0124	3.1600e-003	3.0000e-005	7.9000e-004	5.0000e-005	8.4000e-004	2.2000e-004	5.0000e-005	2.6000e-004	0.0000	3.4631	3.4631	3.0000e-004	0.0000	3.4705
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.1000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1048	0.1048	0.0000	0.0000	0.1049
Total	4.0000e-004	0.0125	3.5700e-003	3.0000e-005	9.2000e-004	5.0000e-005	9.7000e-004	2.5000e-004	5.0000e-005	2.9000e-004	0.0000	3.5678	3.5678	3.0000e-004	0.0000	3.5754

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0101	0.0000	0.0101	5.0800e-003	0.0000	5.0800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5800e-003	0.0287	0.0127	3.0000e-005		1.2800e-003	1.2800e-003		1.1700e-003	1.1700e-003	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968
Total	2.5800e-003	0.0287	0.0127	3.0000e-005	0.0101	1.2800e-003	0.0114	5.0800e-003	1.1700e-003	6.2500e-003	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968

Technology Park Expansion - South Central Coast Air Basin, Annual

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.4000e-004	0.0124	3.1600e-003	3.0000e-005	7.9000e-004	5.0000e-005	8.4000e-004	2.2000e-004	5.0000e-005	2.6000e-004	0.0000	3.4631	3.4631	3.0000e-004	0.0000	3.4705
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.1000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1048	0.1048	0.0000	0.0000	0.1049
Total	4.0000e-004	0.0125	3.5700e-003	3.0000e-005	9.2000e-004	5.0000e-005	9.7000e-004	2.5000e-004	5.0000e-005	2.9000e-004	0.0000	3.5678	3.5678	3.0000e-004	0.0000	3.5754

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1550	1.1659	1.1029	1.8900e-003		0.0585	0.0585		0.0565	0.0565	0.0000	155.2232	155.2232	0.0277	0.0000	155.9160
Total	0.1550	1.1659	1.1029	1.8900e-003		0.0585	0.0585		0.0565	0.0565	0.0000	155.2232	155.2232	0.0277	0.0000	155.9160

Technology Park Expansion - South Central Coast Air Basin, Annual

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3800e-003	0.0442	0.0130	1.1000e-004	2.8400e-003	1.3000e-004	2.9700e-003	8.2000e-004	1.3000e-004	9.5000e-004	0.0000	10.7875	10.7875	7.6000e-004	0.0000	10.8065
Worker	3.0500e-003	2.2600e-003	0.0220	6.0000e-005	6.8700e-003	5.0000e-005	6.9100e-003	1.8300e-003	4.0000e-005	1.8700e-003	0.0000	5.5992	5.5992	1.6000e-004	0.0000	5.6031
Total	4.4300e-003	0.0465	0.0350	1.7000e-004	9.7100e-003	1.8000e-004	9.8800e-003	2.6500e-003	1.7000e-004	2.8200e-003	0.0000	16.3867	16.3867	9.2000e-004	0.0000	16.4096

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1550	1.1659	1.1029	1.8900e-003		0.0585	0.0585		0.0565	0.0565	0.0000	155.2230	155.2230	0.0277	0.0000	155.9158
Total	0.1550	1.1659	1.1029	1.8900e-003		0.0585	0.0585		0.0565	0.0565	0.0000	155.2230	155.2230	0.0277	0.0000	155.9158

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3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3800e-003	0.0442	0.0130	1.1000e-004	2.8400e-003	1.3000e-004	2.9700e-003	8.2000e-004	1.3000e-004	9.5000e-004	0.0000	10.7875	10.7875	7.6000e-004	0.0000	10.8065
Worker	3.0500e-003	2.2600e-003	0.0220	6.0000e-005	6.8700e-003	5.0000e-005	6.9100e-003	1.8300e-003	4.0000e-005	1.8700e-003	0.0000	5.5992	5.5992	1.6000e-004	0.0000	5.6031
Total	4.4300e-003	0.0465	0.0350	1.7000e-004	9.7100e-003	1.8000e-004	9.8800e-003	2.6500e-003	1.7000e-004	2.8200e-003	0.0000	16.3867	16.3867	9.2000e-004	0.0000	16.4096

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0239	0.1813	0.1845	3.2000e-004		8.5400e-003	8.5400e-003		8.2500e-003	8.2500e-003	0.0000	26.3287	26.3287	4.5900e-003	0.0000	26.4433
Total	0.0239	0.1813	0.1845	3.2000e-004		8.5400e-003	8.5400e-003		8.2500e-003	8.2500e-003	0.0000	26.3287	26.3287	4.5900e-003	0.0000	26.4433

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3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2000e-004	7.0700e-003	2.0600e-003	2.0000e-005	4.8000e-004	2.0000e-005	5.0000e-004	1.4000e-004	2.0000e-005	1.6000e-004	0.0000	1.8135	1.8135	1.3000e-004	0.0000	1.8167
Worker	4.9000e-004	3.4000e-004	3.4300e-003	1.0000e-005	1.1600e-003	1.0000e-005	1.1700e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9154	0.9154	2.0000e-005	0.0000	0.9160
Total	7.1000e-004	7.4100e-003	5.4900e-003	3.0000e-005	1.6400e-003	3.0000e-005	1.6700e-003	4.5000e-004	3.0000e-005	4.8000e-004	0.0000	2.7289	2.7289	1.5000e-004	0.0000	2.7327

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0239	0.1813	0.1845	3.2000e-004		8.5400e-003	8.5400e-003		8.2500e-003	8.2500e-003	0.0000	26.3286	26.3286	4.5900e-003	0.0000	26.4433
Total	0.0239	0.1813	0.1845	3.2000e-004		8.5400e-003	8.5400e-003		8.2500e-003	8.2500e-003	0.0000	26.3286	26.3286	4.5900e-003	0.0000	26.4433

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3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2000e-004	7.0700e-003	2.0600e-003	2.0000e-005	4.8000e-004	2.0000e-005	5.0000e-004	1.4000e-004	2.0000e-005	1.6000e-004	0.0000	1.8135	1.8135	1.3000e-004	0.0000	1.8167
Worker	4.9000e-004	3.4000e-004	3.4300e-003	1.0000e-005	1.1600e-003	1.0000e-005	1.1700e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9154	0.9154	2.0000e-005	0.0000	0.9160
Total	7.1000e-004	7.4100e-003	5.4900e-003	3.0000e-005	1.6400e-003	3.0000e-005	1.6700e-003	4.5000e-004	3.0000e-005	4.8000e-004	0.0000	2.7289	2.7289	1.5000e-004	0.0000	2.7327

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4400e-003	0.0339	0.0440	7.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003	0.0000	5.8848	5.8848	1.8700e-003	0.0000	5.9315
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.4400e-003	0.0339	0.0440	7.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003	0.0000	5.8848	5.8848	1.8700e-003	0.0000	5.9315

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3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.5000e-004	1.5400e-003	0.0000	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4103	0.4103	1.0000e-005	0.0000	0.4106
Total	2.2000e-004	1.5000e-004	1.5400e-003	0.0000	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4103	0.4103	1.0000e-005	0.0000	0.4106

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4400e-003	0.0339	0.0440	7.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003	0.0000	5.8848	5.8848	1.8700e-003	0.0000	5.9314
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.4400e-003	0.0339	0.0440	7.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003	0.0000	5.8848	5.8848	1.8700e-003	0.0000	5.9314

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3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.5000e-004	1.5400e-003	0.0000	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4103	0.4103	1.0000e-005	0.0000	0.4106
Total	2.2000e-004	1.5000e-004	1.5400e-003	0.0000	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4103	0.4103	1.0000e-005	0.0000	0.4106

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3476					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	0.3487	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787

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3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0631	0.0631	0.0000	0.0000	0.0632
Total	3.0000e-005	2.0000e-005	2.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0631	0.0631	0.0000	0.0000	0.0632

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3476					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787
Total	0.3487	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2787

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3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0631	0.0631	0.0000	0.0000	0.0632
Total	3.0000e-005	2.0000e-005	2.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0631	0.0631	0.0000	0.0000	0.0632

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Research & Development	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Research & Development	0.583837	0.034545	0.195361	0.113320	0.019790	0.005939	0.017742	0.018970	0.001888	0.001382	0.004894	0.001093	0.001240

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	72.0879	72.0879	3.2600e-003	6.7000e-004	72.3703
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	72.0879	72.0879	3.2600e-003	6.7000e-004	72.3703
NaturalGas Mitigated	4.2700e-003	0.0388	0.0326	2.3000e-004		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	42.2321	42.2321	8.1000e-004	7.7000e-004	42.4831
NaturalGas Unmitigated	4.2700e-003	0.0388	0.0326	2.3000e-004		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	42.2321	42.2321	8.1000e-004	7.7000e-004	42.4831

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Research & Development	791400	4.2700e-003	0.0388	0.0326	2.3000e-004		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	42.2321	42.2321	8.1000e-004	7.7000e-004	42.4831
Total		4.2700e-003	0.0388	0.0326	2.3000e-004		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	42.2321	42.2321	8.1000e-004	7.7000e-004	42.4831

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Research & Development	791400	4.2700e-003	0.0388	0.0326	2.3000e-004		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	42.2321	42.2321	8.1000e-004	7.7000e-004	42.4831
Total		4.2700e-003	0.0388	0.0326	2.3000e-004		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	42.2321	42.2321	8.1000e-004	7.7000e-004	42.4831

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Research & Development	247800	72.0879	3.2600e-003	6.7000e-004	72.3703
Total		72.0879	3.2600e-003	6.7000e-004	72.3703

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Research & Development	247800	72.0879	3.2600e-003	6.7000e-004	72.3703
Total		72.0879	3.2600e-003	6.7000e-004	72.3703

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1520	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004
Unmitigated	0.1520	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0348					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004
Total	0.1520	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0348					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004
Total	0.1520	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004

7.0 Water Detail

Technology Park Expansion - South Central Coast Air Basin, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	27.8993	0.4817	0.0116	43.3888
Unmitigated	27.8993	0.4817	0.0116	43.3888

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Research & Development	14.7508 / 0	27.8993	0.4817	0.0116	43.3888
Total		27.8993	0.4817	0.0116	43.3888

Technology Park Expansion - South Central Coast Air Basin, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Research & Development	14.7508 / 0	27.8993	0.4817	0.0116	43.3888
Total		27.8993	0.4817	0.0116	43.3888

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.4628	0.0274	0.0000	1.1466
Unmitigated	0.4628	0.0274	0.0000	1.1466

Technology Park Expansion - South Central Coast Air Basin, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Research & Development	2.28	0.4628	0.0274	0.0000	1.1466
Total		0.4628	0.0274	0.0000	1.1466

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Research & Development	2.28	0.4628	0.0274	0.0000	1.1466
Total		0.4628	0.0274	0.0000	1.1466

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Technology Park Expansion - South Central Coast Air Basin, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Technology Park Expansion - South Central Coast Air Basin, Summer

Technology Park Expansion
South Central Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	30.00	1000sqft	1.90	30,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.9	Precipitation Freq (Days)	37
Climate Zone	4			Operational Year	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - From Project Description

Construction Phase -

Grading - Cal Poly Correspondence (2019)

Project Description

Vehicle Trips - From Project Description

Technology Park Expansion - South Central Coast Air Basin, Summer

Table Name	Column Name	Default Value	New Value
tblGrading	AcresOfGrading	1.50	1.90
tblGrading	MaterialExported	0.00	735.00
tblLandUse	LotAcreage	0.69	1.90
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	WD_TR	8.11	0.00

2.0 Emissions Summary

Technology Park Expansion - South Central Coast Air Basin, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8328	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Energy	0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0846	255.0846	4.8900e-003	4.6800e-003	256.6005
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.8561	0.2126	0.1816	1.2800e-003	0.0000	0.0162	0.0162	0.0000	0.0162	0.0162		255.0912	255.0912	4.9100e-003	4.6800e-003	256.6075

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8328	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Energy	0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0846	255.0846	4.8900e-003	4.6800e-003	256.6005
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.8561	0.2126	0.1816	1.2800e-003	0.0000	0.0162	0.0162	0.0000	0.0162	0.0162		255.0912	255.0912	4.9100e-003	4.6800e-003	256.6075

Technology Park Expansion - South Central Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/29/2021	4/30/2021	5	2	
2	Grading	Grading	5/1/2021	5/6/2021	5	4	
3	Building Construction	Building Construction	5/7/2021	2/10/2022	5	200	
4	Paving	Paving	2/11/2022	2/24/2022	5	10	
5	Architectural Coating	Architectural Coating	2/25/2022	3/10/2022	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.9

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 45,000; Non-Residential Outdoor: 15,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Technology Park Expansion - South Central Coast Air Basin, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	92.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	10.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Technology Park Expansion - South Central Coast Air Basin, Summer

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.5558	17.4203	7.5605	0.0172		0.7654	0.7654		0.7041	0.7041		1,666.5174	1,666.5174	0.5390		1,679.9920
Total	1.5558	17.4203	7.5605	0.0172	5.7996	0.7654	6.5650	2.9537	0.7041	3.6578		1,666.5174	1,666.5174	0.5390		1,679.9920

Technology Park Expansion - South Central Coast Air Basin, Summer

3.2 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0280	0.0188	0.2108	6.0000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		59.8790	59.8790	1.6600e-003		59.9204
Total	0.0280	0.0188	0.2108	6.0000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		59.8790	59.8790	1.6600e-003		59.9204

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.5558	17.4203	7.5605	0.0172		0.7654	0.7654		0.7041	0.7041	0.0000	1,666.5174	1,666.5174	0.5390		1,679.9920
Total	1.5558	17.4203	7.5605	0.0172	5.7996	0.7654	6.5650	2.9537	0.7041	3.6578	0.0000	1,666.5174	1,666.5174	0.5390		1,679.9920

Technology Park Expansion - South Central Coast Air Basin, Summer

3.2 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0280	0.0188	0.2108	6.0000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		59.8790	59.8790	1.6600e-003		59.9204
Total	0.0280	0.0188	0.2108	6.0000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		59.8790	59.8790	1.6600e-003		59.9204

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.0501	0.0000	5.0501	2.5416	0.0000	2.5416			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869		1,365.0648	1,365.0648	0.4415		1,376.1020
Total	1.2884	14.3307	6.3314	0.0141	5.0501	0.6379	5.6880	2.5416	0.5869	3.1285		1,365.0648	1,365.0648	0.4415		1,376.1020

Technology Park Expansion - South Central Coast Air Basin, Summer

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1681	6.0873	1.5399	0.0175	0.4006	0.0245	0.4251	0.1097	0.0235	0.1331		1,920.8291	1,920.8291	0.1625		1,924.8918
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0280	0.0188	0.2108	6.0000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		59.8790	59.8790	1.6600e-003		59.9204
Total	0.1961	6.1061	1.7508	0.0181	0.4663	0.0249	0.4912	0.1271	0.0239	0.1509		1,980.7081	1,980.7081	0.1642		1,984.8122

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.0501	0.0000	5.0501	2.5416	0.0000	2.5416			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869	0.0000	1,365.0648	1,365.0648	0.4415		1,376.1020
Total	1.2884	14.3307	6.3314	0.0141	5.0501	0.6379	5.6880	2.5416	0.5869	3.1285	0.0000	1,365.0648	1,365.0648	0.4415		1,376.1020

Technology Park Expansion - South Central Coast Air Basin, Summer

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1681	6.0873	1.5399	0.0175	0.4006	0.0245	0.4251	0.1097	0.0235	0.1331		1,920.8291	1,920.8291	0.1625		1,924.8918
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0280	0.0188	0.2108	6.0000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		59.8790	59.8790	1.6600e-003		59.9204
Total	0.1961	6.1061	1.7508	0.0181	0.4663	0.0249	0.4912	0.1271	0.0239	0.1509		1,980.7081	1,980.7081	0.1642		1,984.8122

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517
Total	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517

Technology Park Expansion - South Central Coast Air Basin, Summer

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0158	0.5115	0.1442	1.3000e-003	0.0338	1.5300e-003	0.0353	9.7200e-003	1.4600e-003	0.0112		140.4465	140.4465	9.5700e-003		140.6857
Worker	0.0350	0.0235	0.2636	7.5000e-004	0.0822	5.4000e-004	0.0827	0.0218	5.0000e-004	0.0223		74.8487	74.8487	2.0700e-003		74.9005
Total	0.0508	0.5350	0.4078	2.0500e-003	0.1159	2.0700e-003	0.1180	0.0315	1.9600e-003	0.0335		215.2952	215.2952	0.0116		215.5862

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517
Total	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517

Technology Park Expansion - South Central Coast Air Basin, Summer

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0158	0.5115	0.1442	1.3000e-003	0.0338	1.5300e-003	0.0353	9.7200e-003	1.4600e-003	0.0112		140.4465	140.4465	9.5700e-003		140.6857
Worker	0.0350	0.0235	0.2636	7.5000e-004	0.0822	5.4000e-004	0.0827	0.0218	5.0000e-004	0.0223		74.8487	74.8487	2.0700e-003		74.9005
Total	0.0508	0.5350	0.4078	2.0500e-003	0.1159	2.0700e-003	0.1180	0.0315	1.9600e-003	0.0335		215.2952	215.2952	0.0116		215.5862

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689		2,001.5429	2,001.5429	0.3486		2,010.2581
Total	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689		2,001.5429	2,001.5429	0.3486		2,010.2581

Technology Park Expansion - South Central Coast Air Basin, Summer

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0146	0.4825	0.1347	1.2900e-003	0.0338	1.3300e-003	0.0351	9.7300e-003	1.2700e-003	0.0110		139.2389	139.2389	9.4600e-003		139.4754
Worker	0.0329	0.0211	0.2426	7.2000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		72.1530	72.1530	1.8600e-003		72.1996
Total	0.0475	0.5036	0.3773	2.0100e-003	0.1160	1.8500e-003	0.1178	0.0315	1.7500e-003	0.0333		211.3919	211.3919	0.0113		211.6750

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689	0.0000	2,001.5429	2,001.5429	0.3486		2,010.2581
Total	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689	0.0000	2,001.5429	2,001.5429	0.3486		2,010.2581

Technology Park Expansion - South Central Coast Air Basin, Summer

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0146	0.4825	0.1347	1.2900e-003	0.0338	1.3300e-003	0.0351	9.7300e-003	1.2700e-003	0.0110		139.2389	139.2389	9.4600e-003		139.4754
Worker	0.0329	0.0211	0.2426	7.2000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		72.1530	72.1530	1.8600e-003		72.1996
Total	0.0475	0.5036	0.3773	2.0100e-003	0.1160	1.8500e-003	0.1178	0.0315	1.7500e-003	0.0333		211.3919	211.3919	0.0113		211.6750

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205		1,297.3789	1,297.3789	0.4113		1,307.6608
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205		1,297.3789	1,297.3789	0.4113		1,307.6608

Technology Park Expansion - South Central Coast Air Basin, Summer

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0274	0.3154	9.4000e-004	0.1068	6.8000e-004	0.1075	0.0283	6.3000e-004	0.0290		93.7989	93.7989	2.4200e-003		93.8594
Total	0.0427	0.0274	0.3154	9.4000e-004	0.1068	6.8000e-004	0.1075	0.0283	6.3000e-004	0.0290		93.7989	93.7989	2.4200e-003		93.8594

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205	0.0000	1,297.3789	1,297.3789	0.4113		1,307.6608
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205	0.0000	1,297.3789	1,297.3789	0.4113		1,307.6608

Technology Park Expansion - South Central Coast Air Basin, Summer

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0274	0.3154	9.4000e-004	0.1068	6.8000e-004	0.1075	0.0283	6.3000e-004	0.0290		93.7989	93.7989	2.4200e-003		93.8594
Total	0.0427	0.0274	0.3154	9.4000e-004	0.1068	6.8000e-004	0.1075	0.0283	6.3000e-004	0.0290		93.7989	93.7989	2.4200e-003		93.8594

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	69.5250					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	69.7295	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

Technology Park Expansion - South Central Coast Air Basin, Summer

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	6.5700e-003	4.2200e-003	0.0485	1.4000e-004	0.0164	1.0000e-004	0.0165	4.3600e-003	1.0000e-004	4.4500e-003		14.4306	14.4306	3.7000e-004		14.4399
Total	6.5700e-003	4.2200e-003	0.0485	1.4000e-004	0.0164	1.0000e-004	0.0165	4.3600e-003	1.0000e-004	4.4500e-003		14.4306	14.4306	3.7000e-004		14.4399

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	69.5250					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	69.7295	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

Technology Park Expansion - South Central Coast Air Basin, Summer

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	6.5700e-003	4.2200e-003	0.0485	1.4000e-004	0.0164	1.0000e-004	0.0165	4.3600e-003	1.0000e-004	4.4500e-003		14.4306	14.4306	3.7000e-004		14.4399
Total	6.5700e-003	4.2200e-003	0.0485	1.4000e-004	0.0164	1.0000e-004	0.0165	4.3600e-003	1.0000e-004	4.4500e-003		14.4306	14.4306	3.7000e-004		14.4399

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Technology Park Expansion - South Central Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Research & Development	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Research & Development	0.583837	0.034545	0.195361	0.113320	0.019790	0.005939	0.017742	0.018970	0.001888	0.001382	0.004894	0.001093	0.001240

5.0 Energy Detail

Historical Energy Use: N

Technology Park Expansion - South Central Coast Air Basin, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0846	255.0846	4.8900e-003	4.6800e-003	256.6005
NaturalGas Unmitigated	0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0846	255.0846	4.8900e-003	4.6800e-003	256.6005

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Research & Development	2168.22	0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0846	255.0846	4.8900e-003	4.6800e-003	256.6005
Total		0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0846	255.0846	4.8900e-003	4.6800e-003	256.6005

Technology Park Expansion - South Central Coast Air Basin, Summer

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Research & Development	2.16822	0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0846	255.0846	4.8900e-003	4.6800e-003	256.6005
Total		0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0846	255.0846	4.8900e-003	4.6800e-003	256.6005

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8328	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Unmitigated	0.8328	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003

Technology Park Expansion - South Central Coast Air Basin, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1905					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6420					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8000e-004	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Total	0.8328	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1905					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6420					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8000e-004	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Total	0.8328	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003

7.0 Water Detail

Technology Park Expansion - South Central Coast Air Basin, Summer

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Technology Park Expansion - South Central Coast Air Basin, Winter

Technology Park Expansion
South Central Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	30.00	1000sqft	1.90	30,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.9	Precipitation Freq (Days)	37
Climate Zone	4			Operational Year	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - From Project Description
- Construction Phase -
- Grading - Cal Poly Correspondence (2019) Project Description
- Vehicle Trips - From Project Description

Technology Park Expansion - South Central Coast Air Basin, Winter

Table Name	Column Name	Default Value	New Value
tblGrading	AcresOfGrading	1.50	1.90
tblGrading	MaterialExported	0.00	735.00
tblLandUse	LotAcreage	0.69	1.90
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	WD_TR	8.11	0.00

2.0 Emissions Summary

Technology Park Expansion - South Central Coast Air Basin, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8328	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Energy	0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0846	255.0846	4.8900e-003	4.6800e-003	256.6005
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.8561	0.2126	0.1816	1.2800e-003	0.0000	0.0162	0.0162	0.0000	0.0162	0.0162		255.0912	255.0912	4.9100e-003	4.6800e-003	256.6075

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8328	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Energy	0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0846	255.0846	4.8900e-003	4.6800e-003	256.6005
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.8561	0.2126	0.1816	1.2800e-003	0.0000	0.0162	0.0162	0.0000	0.0162	0.0162		255.0912	255.0912	4.9100e-003	4.6800e-003	256.6075

Technology Park Expansion - South Central Coast Air Basin, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/29/2021	4/30/2021	5	2	
2	Grading	Grading	5/1/2021	5/6/2021	5	4	
3	Building Construction	Building Construction	5/7/2021	2/10/2022	5	200	
4	Paving	Paving	2/11/2022	2/24/2022	5	10	
5	Architectural Coating	Architectural Coating	2/25/2022	3/10/2022	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.9

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 45,000; Non-Residential Outdoor: 15,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Technology Park Expansion - South Central Coast Air Basin, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	92.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	10.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Technology Park Expansion - South Central Coast Air Basin, Winter

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.5558	17.4203	7.5605	0.0172		0.7654	0.7654		0.7041	0.7041		1,666.5174	1,666.5174	0.5390		1,679.9920
Total	1.5558	17.4203	7.5605	0.0172	5.7996	0.7654	6.5650	2.9537	0.7041	3.6578		1,666.5174	1,666.5174	0.5390		1,679.9920

Technology Park Expansion - South Central Coast Air Basin, Winter

3.2 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0319	0.0217	0.2084	5.8000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		57.3853	57.3853	1.6100e-003		57.4257
Total	0.0319	0.0217	0.2084	5.8000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		57.3853	57.3853	1.6100e-003		57.4257

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.5558	17.4203	7.5605	0.0172		0.7654	0.7654		0.7041	0.7041	0.0000	1,666.5174	1,666.5174	0.5390		1,679.9920
Total	1.5558	17.4203	7.5605	0.0172	5.7996	0.7654	6.5650	2.9537	0.7041	3.6578	0.0000	1,666.5174	1,666.5174	0.5390		1,679.9920

Technology Park Expansion - South Central Coast Air Basin, Winter

3.2 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0319	0.0217	0.2084	5.8000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		57.3853	57.3853	1.6100e-003		57.4257
Total	0.0319	0.0217	0.2084	5.8000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		57.3853	57.3853	1.6100e-003		57.4257

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.0501	0.0000	5.0501	2.5416	0.0000	2.5416			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869		1,365.0648	1,365.0648	0.4415		1,376.1020
Total	1.2884	14.3307	6.3314	0.0141	5.0501	0.6379	5.6880	2.5416	0.5869	3.1285		1,365.0648	1,365.0648	0.4415		1,376.1020

Technology Park Expansion - South Central Coast Air Basin, Winter

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1728	6.1354	1.6281	0.0172	0.4006	0.0252	0.4257	0.1097	0.0241	0.1337		1,891.9151	1,891.9151	0.1670		1,896.0898
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0319	0.0217	0.2084	5.8000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		57.3853	57.3853	1.6100e-003		57.4257
Total	0.2047	6.1570	1.8365	0.0178	0.4663	0.0256	0.4919	0.1271	0.0245	0.1516		1,949.3004	1,949.3004	0.1686		1,953.5155

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.0501	0.0000	5.0501	2.5416	0.0000	2.5416			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869	0.0000	1,365.0648	1,365.0648	0.4415		1,376.1020
Total	1.2884	14.3307	6.3314	0.0141	5.0501	0.6379	5.6880	2.5416	0.5869	3.1285	0.0000	1,365.0648	1,365.0648	0.4415		1,376.1020

Technology Park Expansion - South Central Coast Air Basin, Winter

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1728	6.1354	1.6281	0.0172	0.4006	0.0252	0.4257	0.1097	0.0241	0.1337		1,891.9151	1,891.9151	0.1670		1,896.0898
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0319	0.0217	0.2084	5.8000e-004	0.0657	4.3000e-004	0.0662	0.0174	4.0000e-004	0.0178		57.3853	57.3853	1.6100e-003		57.4257
Total	0.2047	6.1570	1.8365	0.0178	0.4663	0.0256	0.4919	0.1271	0.0245	0.1516		1,949.3004	1,949.3004	0.1686		1,953.5155

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517
Total	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517

Technology Park Expansion - South Central Coast Air Basin, Winter

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0167	0.5106	0.1606	1.2700e-003	0.0338	1.6000e-003	0.0354	9.7200e-003	1.5300e-003	0.0113		137.1901	137.1901	0.0101		137.4425
Worker	0.0398	0.0271	0.2605	7.2000e-004	0.0822	5.4000e-004	0.0827	0.0218	5.0000e-004	0.0223		71.7316	71.7316	2.0200e-003		71.7821
Total	0.0566	0.5377	0.4212	1.9900e-003	0.1159	2.1400e-003	0.1181	0.0315	2.0300e-003	0.0336		208.9218	208.9218	0.0121		209.2246

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517
Total	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517

Technology Park Expansion - South Central Coast Air Basin, Winter

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0167	0.5106	0.1606	1.2700e-003	0.0338	1.6000e-003	0.0354	9.7200e-003	1.5300e-003	0.0113		137.1901	137.1901	0.0101		137.4425
Worker	0.0398	0.0271	0.2605	7.2000e-004	0.0822	5.4000e-004	0.0827	0.0218	5.0000e-004	0.0223		71.7316	71.7316	2.0200e-003		71.7821
Total	0.0566	0.5377	0.4212	1.9900e-003	0.1159	2.1400e-003	0.1181	0.0315	2.0300e-003	0.0336		208.9218	208.9218	0.0121		209.2246

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689		2,001.5429	2,001.5429	0.3486		2,010.2581
Total	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689		2,001.5429	2,001.5429	0.3486		2,010.2581

Technology Park Expansion - South Central Coast Air Basin, Winter

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0155	0.4811	0.1501	1.2600e-003	0.0338	1.4000e-003	0.0352	9.7300e-003	1.3400e-003	0.0111		135.9727	135.9727	9.9800e-003		136.2222
Worker	0.0375	0.0244	0.2392	6.9000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		69.1485	69.1485	1.8100e-003		69.1938
Total	0.0529	0.5055	0.3893	1.9500e-003	0.1160	1.9200e-003	0.1179	0.0315	1.8200e-003	0.0333		205.1212	205.1212	0.0118		205.4159

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689	0.0000	2,001.5429	2,001.5429	0.3486		2,010.2581
Total	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689	0.0000	2,001.5429	2,001.5429	0.3486		2,010.2581

Technology Park Expansion - South Central Coast Air Basin, Winter

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0155	0.4811	0.1501	1.2600e-003	0.0338	1.4000e-003	0.0352	9.7300e-003	1.3400e-003	0.0111		135.9727	135.9727	9.9800e-003		136.2222
Worker	0.0375	0.0244	0.2392	6.9000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		69.1485	69.1485	1.8100e-003		69.1938
Total	0.0529	0.5055	0.3893	1.9500e-003	0.1160	1.9200e-003	0.1179	0.0315	1.8200e-003	0.0333		205.1212	205.1212	0.0118		205.4159

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205		1,297.3789	1,297.3789	0.4113		1,307.6608
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205		1,297.3789	1,297.3789	0.4113		1,307.6608

Technology Park Expansion - South Central Coast Air Basin, Winter

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0317	0.3110	9.0000e-004	0.1068	6.8000e-004	0.1075	0.0283	6.3000e-004	0.0290		89.8930	89.8930	2.3500e-003		89.9519
Total	0.0487	0.0317	0.3110	9.0000e-004	0.1068	6.8000e-004	0.1075	0.0283	6.3000e-004	0.0290		89.8930	89.8930	2.3500e-003		89.9519

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205	0.0000	1,297.3789	1,297.3789	0.4113		1,307.6608
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205	0.0000	1,297.3789	1,297.3789	0.4113		1,307.6608

Technology Park Expansion - South Central Coast Air Basin, Winter

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0317	0.3110	9.0000e-004	0.1068	6.8000e-004	0.1075	0.0283	6.3000e-004	0.0290		89.8930	89.8930	2.3500e-003		89.9519
Total	0.0487	0.0317	0.3110	9.0000e-004	0.1068	6.8000e-004	0.1075	0.0283	6.3000e-004	0.0290		89.8930	89.8930	2.3500e-003		89.9519

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	69.5250					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	69.7295	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

Technology Park Expansion - South Central Coast Air Basin, Winter

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.4900e-003	4.8700e-003	0.0478	1.4000e-004	0.0164	1.0000e-004	0.0165	4.3600e-003	1.0000e-004	4.4500e-003		13.8297	13.8297	3.6000e-004		13.8388
Total	7.4900e-003	4.8700e-003	0.0478	1.4000e-004	0.0164	1.0000e-004	0.0165	4.3600e-003	1.0000e-004	4.4500e-003		13.8297	13.8297	3.6000e-004		13.8388

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	69.5250					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	69.7295	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

Technology Park Expansion - South Central Coast Air Basin, Winter

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.4900e-003	4.8700e-003	0.0478	1.4000e-004	0.0164	1.0000e-004	0.0165	4.3600e-003	1.0000e-004	4.4500e-003		13.8297	13.8297	3.6000e-004		13.8388
Total	7.4900e-003	4.8700e-003	0.0478	1.4000e-004	0.0164	1.0000e-004	0.0165	4.3600e-003	1.0000e-004	4.4500e-003		13.8297	13.8297	3.6000e-004		13.8388

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Technology Park Expansion - South Central Coast Air Basin, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Research & Development	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Research & Development	0.583837	0.034545	0.195361	0.113320	0.019790	0.005939	0.017742	0.018970	0.001888	0.001382	0.004894	0.001093	0.001240

5.0 Energy Detail

Historical Energy Use: N

Technology Park Expansion - South Central Coast Air Basin, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0846	255.0846	4.8900e-003	4.6800e-003	256.6005
NaturalGas Unmitigated	0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0846	255.0846	4.8900e-003	4.6800e-003	256.6005

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Research & Development	2168.22	0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0846	255.0846	4.8900e-003	4.6800e-003	256.6005
Total		0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0846	255.0846	4.8900e-003	4.6800e-003	256.6005

Technology Park Expansion - South Central Coast Air Basin, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Research & Development	2.16822	0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0846	255.0846	4.8900e-003	4.6800e-003	256.6005
Total		0.0234	0.2126	0.1786	1.2800e-003		0.0162	0.0162		0.0162	0.0162		255.0846	255.0846	4.8900e-003	4.6800e-003	256.6005

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8328	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Unmitigated	0.8328	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003

Technology Park Expansion - South Central Coast Air Basin, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1905					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6420					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8000e-004	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Total	0.8328	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1905					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6420					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8000e-004	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Total	0.8328	3.0000e-005	3.0600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003

7.0 Water Detail

Technology Park Expansion - South Central Coast Air Basin, Winter

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Appendix B

Special Status Species Documented within a 5-mile Radius of Project Site

Special Status Species and Sensitive Communities within Five Miles of the Project Site

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Rationale
Plants and Lichens				
<i>Agrostis hooveri</i> Hoover's bent grass	None/None G2/S2 1B.2	Chaparral, cismontane woodland, closed-cone coniferous forest, valley and foothill grassland. Sandy sites. 60-765 m. perennial herb. Blooms Apr-Jul	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Arctostaphylos luciana</i> Santa Lucia manzanita	None/None G2/S2 1B.2	Chaparral, cismontane woodland. On shale (one site says serpentine) outcrops, on slopes, in chaparral. 105-825 m. perennial evergreen shrub. Blooms Dec-Mar	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Arctostaphylos pechoensis</i> Pecho manzanita	None/None G2/S2 1B.2	Closed-cone coniferous forest, chaparral, coastal scrub. Grows on siliceous shale with other chaparral associates. 60-855 m. perennial evergreen shrub. Blooms Nov-Mar	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Arctostaphylos pilosula</i> Santa Margarita manzanita	None/None G2?/S2? 1B.2	Closed-cone coniferous forest, chaparral, broadleafed upland forest, cismontane woodland. Shale outcrops & slopes; reported growing on decomposed granite or sandstone. 60-1220 m. perennial evergreen shrub. Blooms Dec-May	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Astragalus didymocarpus</i> var. <i>milesianus</i> Miles' milk-vetch	None/None G5T2/S2 1B.2	Coastal scrub. Clay soils. 50-385 m. annual herb. Blooms Mar-Jun	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Calochortus obispoensis</i> San Luis mariposa-lily	None/None G2/S2 1B.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Often in serpentine grassland. 15-550 m. perennial bulbiferous herb. Blooms May-Jul	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Calochortus simulans</i> La Panza mariposa-lily	None/None G2/S2 1B.3	Valley and foothill grassland, cismontane woodland, chaparral, lower montane coniferous forest. Decomposed granite. 50-1160 m. perennial bulbiferous herb. Blooms Apr-Jun	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Calystegia subacaulis</i> ssp. <i>episcopalis</i> Cambria morning-glory	None/None G3T2?/S2? 4.2	Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland. 5-475 m. perennial rhizomatous herb. Blooms (Mar)Apr-Jun(Jul)	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Carex obispoensis</i> San Luis Obispo sedge	None/None G3?/S3? 1B.2	Closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland. Usually in transition zone on sand, clay, serpentine, or gabbro. In seeps. 5-845 m. perennial herb. Blooms Apr-Jun	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.

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Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Rationale
<i>Castilleja densiflora</i> var. <i>obispoensis</i> San Luis Obispo owl's-clover	None/None G5T2/S2 1B.2	Valley and foothill grassland, meadows and seeps. Sometimes on serpentine. 10-485 m. annual herb (hemiparasitic). Blooms Mar-May	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Centromadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	None/None G3T1T2/S1S2 1B.1	Valley and foothill grassland. Alkaline soils, sometimes described as heavy white clay. 0-230 m. annual herb. Blooms May-Oct(Nov)	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Chlorogalum pomeridianum</i> var. <i>minus</i> dwarf soaproot	None/None G5T3/S3 1B.2	Chaparral. Serpentine. 120-1220 m. perennial bulbiferous herb. Blooms May-Aug	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Chorizanthe breweri</i> Brewer's spineflower	None/None G3/S3 1B.3	Chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest. Rocky or gravelly serpentine sites; usually in barren areas. 45-765 m. annual herb. Blooms Apr-Aug	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Cirsium fontinale</i> var. <i>obispoense</i> San Luis Obispo fountain thistle	Endangered/ Endangered G2T2/S2 1B.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Serpentine seeps. 5-385 m. perennial herb. Blooms Feb-Jul(Aug-Sep)	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Cirsium occidentale</i> var. <i>lucianum</i> Cuesta Ridge thistle	None/None G3G4T2/S2 1B.2	Chaparral. Openings; on serpentinite. Often on steep rocky slopes and along disturbed roadsides. 485-765 m. perennial herb. Blooms Apr-Jun	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Delphinium parryi</i> ssp. <i>eastwoodiae</i> Eastwood's larkspur	None/None G4T2/S2 1B.2	Chaparral, valley and foothill grassland. Serpentine. Openings. 60-640 m. perennial herb. Blooms (Feb)Mar-Mar	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Dudleya abramsii</i> ssp. <i>bettinae</i> Betty's dudleya	None/None G4T2/S2 1B.2	Coastal scrub, valley and foothill grassland, chaparral. On rocky, barren exposures of serpentine within scrub vegetation. 20-250 m. perennial herb. Blooms May-Jul	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Dudleya abramsii</i> ssp. <i>murina</i> mouse-gray dudleya	None/None G4T2/S2 1B.3	Chaparral, cismontane woodland, valley and foothill grassland. Serpentine outcrops. 25-535 m. perennial leaf succulent. Blooms May-Jun	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> Blochman's dudleya	None/None G3T2/S2 1B.1	Coastal scrub, coastal bluff scrub, chaparral, valley and foothill grassland. Open, rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil. 5-450 m. perennial herb. Blooms Apr-Jun	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.

Special Status Species and Sensitive Communities within Five Miles of the Project Site

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Rationale
<i>Eryngium aristulatum</i> var. <i>hooveri</i> Hoover's button-celery	None/None G5T1/S1 1B.1	Vernal pools. Alkaline depressions, vernal pools, roadside ditches and other wet places near the coast. 1-50 m. annual/perennial herb. Blooms (Jun)Jul(Aug)	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Fritillaria ojaiensis</i> Ojai fritillary	None/None G3/S3 1B.2	Broadleafed upland forest (mesic), chaparral, lower montane coniferous forest, cismontane woodland. Usually loamy soil. Sometimes on serpentine; sometimes along roadsides. 100-1140 m. perennial bulbiferous herb. Blooms Feb-May	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Fritillaria viridea</i> San Benito fritillary	None/None G2/S2 1B.2	Chaparral, cismontane woodland. Serpentine slopes. Sometimes on rocky streambanks. 365-1360 m. perennial bulbiferous herb. Blooms Mar-May	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Horkelia cuneata</i> var. <i>puberula</i> mesa horkelia	None/None G4T1/S1 1B.1	Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 15-1645 m. perennial herb. Blooms Feb-Jul(Sep)	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Layia jonesii</i> Jones' layia	None/None G2/S2 1B.2	Chaparral, valley and foothill grassland. Clay soils and serpentine outcrops. 5-245 m. annual herb. Blooms Mar-May	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Monardella palmeri</i> Palmer's monardella	None/None G2/S2 1B.2	Cismontane woodland, chaparral. On serpentine, often found associated with Sargent cypress forests. 90-945 m. perennial rhizomatous herb. Blooms Jun-Aug	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Plagiobothrys uncinatus</i> hooked popcornflower	None/None G2/S2 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Sandstone outcrops and canyon sides; often in burned or disturbed areas. 210-855 m. annual herb. Blooms Apr-May	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Sanicula maritima</i> adobe sanicle	None/Rare G2/S2 1B.1	Meadows and seeps, valley and foothill grassland, chaparral, coastal prairie. Moist clay or ultramafic soils. 15-215 m. perennial herb. Blooms Feb-May	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Senecio aphanactis</i> chaparral ragwort	None/None G3/S2 2B.2	Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. 20-855 m. annual herb. Blooms Jan-Apr(May)	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Sidalcea hickmanii</i> ssp. <i>anomala</i> Cuesta Pass checkerbloom	None/Rare G3T1/S1 1B.2	Closed-cone coniferous forest, chaparral Rocky serpentine soil; associated with Sargent cypress forest. 600-800 m. perennial herb. Blooms May-Jun	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.

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Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Rationale
<i>Streptanthus albidus</i> ssp. <i>peramoenus</i> most beautiful jewelflower	None/None G2T2/S2 1B.2	Chaparral, valley and foothill grassland, cismontane woodland. Serpentine outcrops, on ridges and slopes. 90-1040 m. annual herb. Blooms (Mar)Apr-Sep(Oct)	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Trifolium hydrophilum</i> saline clover	None/None G2/S2 1B.2	Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. 1-335 m. annual herb. Blooms Apr-Jun	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
Invertebrates				
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	Threatened/ None G3/S3 –	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Danaus plexippus</i> pop. 1 monarch - California overwintering population	None/None G4T2T3/S2S3 –	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
Fish				
<i>Oncorhynchus mykiss irideus</i> pop. 9 steelhead - south-central California coast DPS	Threatened/ None G5T2Q/S2 SSC	Federal listing refers to runs in coastal basins from the Pajaro River south to, but not including, the Santa Maria River.	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
Amphibians				
<i>Batrachoseps minor</i> lesser slender salamander	None/None G1/S1 SSC	South Santa Lucia Mountains in tanbark oak, coast live oak, blue oak, sycamore & laurel. Shaded slopes with abundant leaf litter.	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Rana boylei</i> foothill yellow-legged frog	None/ Candidate Threatened G3/S3 SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Rana draytonii</i> California red-legged frog	Threatened/ None G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	None	The project site is currently developed and does not contain suitable habitat for this species. The project site is also surrounded by agriculture as well as other developed areas. This species is not expected to occur.

Special Status Species and Sensitive Communities within Five Miles of the Project Site

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Rationale
<i>Taricha torosa</i> Coast Range newt	None/None G4/S4 SSC	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats & will migrate over 1 km to breed in ponds, reservoirs & slow moving streams.	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
Reptiles				
<i>Anniella pulchra</i> northern California legless lizard	None/None G3/S3 SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Emys marmorata</i> western pond turtle	None/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Phrynosoma blainvillii</i> coast horned lizard	None/None G3G4/S3S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
Birds				
<i>Agelaius tricolor</i> tricolored blackbird	None/ Candidate Endangered G2G3/S1S2 SSC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Athene cunicularia</i> burrowing owl	None/None G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Buteo regalis</i> ferruginous hawk	None/None G4/S3S4 WL	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Elanus leucurus</i> white-tailed kite	None/None G5/S3S4 FP	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.

California Polytechnic State University
Technology Park Expansion Project

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Rationale
<i>Eremophila alpestris actia</i> California horned lark	None/None G5T4Q/S4 WL	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Falco mexicanus</i> prairie falcon	None/None G5/S4 WL	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
<i>Lanius ludovicianus</i> loggerhead shrike	None/None G4/S4 SSC	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub & washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
Mammals				
<i>Antrozous pallidus</i> pallid bat	None/None G5/S3 SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Moderate	Potentially suitable roosting habitat is located at on-site and adjacent buildings. In addition, the larger trees on site may be utilized as day roosts.
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	None/None G3G4/S2 SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	None	The project site is currently developed and does not contain suitably large, deep and cave like roosting cavities, nor do they occur adjacent to the site. This species is not expected to occur.
<i>Eumops perotis californicus</i> western mastiff bat	None/None G5T4/S3S4 SSC	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	Moderate	Potentially suitable roosting habitat is located at on-site and adjacent buildings. In addition, the larger trees on site may be utilized as day roosts.
<i>Taxidea taxus</i> American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	None	The project site is currently developed and does not contain suitable habitat for this species. This species is not expected to occur.
Sensitive Natural Communities				
<i>Coastal and Valley Freshwater Marsh</i> Coastal and Valley Freshwater Marsh	None/None G3/S2.1 –		None	This natural community does not occur within the project site.

Special Status Species and Sensitive Communities within Five Miles of the Project Site

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Rationale
<i>Northern Interior Cypress Forest</i> Northern Interior Cypress Forest	None/None G2/S2.2 –		None	This natural community does not occur within the project site.
<i>Serpentine Bunchgrass</i> Serpentine Bunchgrass	None/None G2/S2.2 –		None	This natural community does not occur within the project site.

FE = Federally Endangered FT = Federally Threatened FC = Federal Candidate Species FS=Federally Sensitive
 SE = State Endangered ST = State Threatened SC = State Candidate SS=State Sensitive
 SSC = CDFW Species of Special Concern FP = State Fully Protected WL= Watch List

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Appendix C

Noise Modeling Worksheets

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 4/19/2019
 Case Description: Site Preparation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Existing Techn	Commercial	50	40	40

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		75	0
Dozer	No	40		81.7	75	0
Backhoe	No	40		77.6	75	0

Equipment	Calculated (dBA)	Results					
		Day		Noise Limits (dBA)			
		*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq
Grader	81.5	77.5	N/A	N/A	N/A	N/A	
Dozer	78.1	74.2	N/A	N/A	N/A	N/A	
Backhoe	74	70.1	N/A	N/A	N/A	N/A	
Total	81.5	79.7	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 4/19/2019

Case Description Site Preparation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Existing Techno	Commercial	50	40	40

Description	Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		75	0
Dozer	No	40		81.7	75	0
Backhoe	No	40		77.6	75	0

Equipment	Results					
	Calculated (dBA)			Noise Limits (dBA)		
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq
Grader	81.5	77.5	N/A	N/A	N/A	N/A
Dozer	78.1	74.2	N/A	N/A	N/A	N/A
Backhoe	74	70.1	N/A	N/A	N/A	N/A
Total	81.5	79.7	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 4/19/2019
 Case Descriptio Building Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Existing Tech P	Commercial	50	40	40

Description	Device	Impact	Equipment			
			Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)
Grader	No		40	85	75	0
Backhoe	No		40		77.6	0
Crane	No		16		80.6	0
Generator	No		50		80.6	0
Man Lift	No		20		74.7	0
Welder / Torch	No		40		74	0
Welder / Torch	No		40		74	0
Welder / Torch	No		40		74	0

Results

Equipment	Calculated (dBA)			Noise Limits (dBA)			
	*Lmax	Leq	Day Lmax	Day		Evening	
				Leq	Lmax	Leq	Lmax
Grader	81.5	77.5	N/A	N/A	N/A	N/A	N/A
Backhoe	74	70.1	N/A	N/A	N/A	N/A	N/A
Crane	77	69.1	N/A	N/A	N/A	N/A	N/A
Generator	77.1	74.1	N/A	N/A	N/A	N/A	N/A
Man Lift	71.2	64.2	N/A	N/A	N/A	N/A	N/A
Welder / Torch	70.5	66.5	N/A	N/A	N/A	N/A	N/A
Welder / Torch	70.5	66.5	N/A	N/A	N/A	N/A	N/A
Welder / Torch	70.5	66.5	N/A	N/A	N/A	N/A	N/A
Total	81.5	80.6	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 4/19/2019

Case Descriptic Paving

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Existing Techno	Commercial	50	40	40

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	75	0
Concrete Mixer Truck	No	40		78.8	75	0
Paver	No	50		77.2	75	0
Roller	No	20		80	75	0
Pavement Scarafier	No	20		89.5	75	0

Equipment	Results							
	Calculated (dBA)				Noise Limits (dBA)			
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	
Backhoe	74	70.1	N/A	N/A	N/A	N/A	N/A	
Concrete Mixer Truck	75.3	71.3	N/A	N/A	N/A	N/A	N/A	
Paver	73.7	70.7	N/A	N/A	N/A	N/A	N/A	
Roller	76.5	69.5	N/A	N/A	N/A	N/A	N/A	
Pavement Scarafier	86	79	N/A	N/A	N/A	N/A	N/A	
Total	86	80.9	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 4/19/2019

Case Description: Architectural Coating

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Existing Techn	Commercial	50	40	40

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Compressor (air)	No	40		77.7	75	0

Equipment	Calculated (dBA)		Results			
	*Lmax	Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq
Compressor (air)	74.1	70.2	N/A	N/A	N/A	N/A
Total	74.1	70.2	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

