Final Initial Study/Mitigated Negative Declaration

California State University, Bakersfield
Ground Mount Solar and Battery Project

Lead Agency:

California State University Board of Trustees
401 Golden Shore
Long Beach, California 90802-4210

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October 2026

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ACRONYMS AND ABBREVIATIONS

AC	alternating current
AB	Assembly Bill
BESS	battery energy storage system
BMP	Best Management Practice
BOT	California State University Board of Trustees
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalGreen	California Green Building Standards
CAL FIRE	California Department of Forestry and Fire Protection
Cal Water	California Water Service Company
California Register	California Register of Historical Resources
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CH_4	methane
CNDDB	California Natural Diversity Database
CNEL	Community noise equivalent level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
CSU	California State University
CSUB	California State University, Bakersfield
dB	decibel
dBA	A-weighted decibel scale
DC	direct current
ESA	Environmental Studies Area
GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts
GHG	greenhouse gas
GWh	gigawatt-hours
GWP	global warming potential
H_2S	hydrogen sulfide
HMMP	Hazardous Materials Management Plan
IS	CEQA Initial Study
L_{eq}	Equivalent Noise Level
MBTA	Migratory Bird Treaty Act
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MW	megawatt
MWh	megawatt-hours
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission

NO_2	nitrogen dioxide
N_2O	nitrous oxide
$MTCO_2e$	metric tons of carbon dioxide equivalent
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
PB	lead
PBDB	Paleobiology Database
PPV	peak particle velocity
PV	photovoltaic
PM	particulate matter
RPS	Renewable Portfolio Standard
SB	Senate Bill
SCADA	Supervisory Control and Data Acquisition
SJKF	San Joaquin kit fox
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SO_2	sulfur dioxide
SOx	sulfur oxide
SSJVIC	Southern San Joaquin Valley Information Center
SVP	Society of Vertebrate Paleontology
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
UCMP	University of California Museum of Paleontology
USACE	U.S. Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VdB	Vibration decibel
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled

1.0 PROJECT DESCRIPTION

1.1 Project Title

Ground Mount Solar and Battery Project

1.2 Lead Agency Name and Address

California State University Board of Trustees
401 Golden Shore
Long Beach, California 90802-4210

1.3 Project Sponsor's Name and Address

California State University, Bakersfield
Capital and Facilities Management Services
9001 Stockdale Hwy, Mail Stop: 5CORP
Bakersfield, CA 93311

1.4 Contact Person, Email, and Phone Number

Kristine E. De Young, MPA
Associate Vice President
kde-young@csub.edu
661-654-2510

1.5 Project Overview

California State University, Bakersfield (CSUB) proposes to implement the Ground Mount Solar and Battery Project (proposed project), which would consist of the installation of a 4.55-megawatt (MW) direct current (dc) ground-mounted photovoltaic (PV) solar energy system and associated electrical components on 15 acres on the main campus. A battery energy storage system (BESS) with an energy capacity of 11.7 megawatt-hours (MWh) would also be installed as part of the proposed project. The proposed solar energy system would be managed and operated by a solar energy operator and would provide an estimated annual production of 8.3 gigawatt-hours (GWh), or approximately 40 percent of the campus's electricity use, increasing renewable energy generation for the campus.

1.6 California Environmental Quality Act

The California Environmental Quality Act (CEQA; California Public Resources Code Section 21000 et seq.) applies to proposed projects initiated by, funded by, or requiring discretionary approvals from state or local government agencies and that have the potential to directly or indirectly result in significant environmental effects. Thus, the construction and operation of the Ground Mount Solar and Battery Project constitute a project as defined by CEQA (California Public Resources Code Section 21065). The CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387) Section 15367 states that a lead agency is "the public agency which has the principal responsibility for carrying out or approving a project." The California State University Board of Trustees (BOT) is the lead agency responsible for compliance with CEQA for the proposed project.

As the CEQA lead agency, the BOT must undertake environmental review to determine if implementation of the proposed project would result in significant adverse environmental

impacts and to propose measures, as feasible, to eliminate or reduce any such identified impacts. CSUB has prepared an Initial Study (IS) to assist in making that determination. Based on the nature and scope of the proposed project and the evaluation contained in the IS environmental checklist (included herein), the BOT, as the lead agency, has concluded that a Mitigated Negative Declaration (MND) is the proper level of CEQA environmental documentation for the project. The IS shows that impacts caused by the proposed project are either less than significant or would be reduced to a less than significant level with the incorporation of appropriate mitigation measures included herein. This conclusion is supported by CEQA Guidelines Section 15070, which states that an MND can be prepared when the IS identifies potentially significant effects, but the proposed project would either include revisions to the project plans or incorporate mitigation measures that would avoid the effects or reduce them to a less than significant level.

1.6.1 Public Review Process

The BOT, acting as lead agency, prepared an IS/MND to inform decision-makers and the public of the potential significant environmental effects associated with the proposed project. The IS/MND was circulated for agency and public review for a 30-day review period from June 16 through July 15, 2026. The IS/MND and Notice of Intent to Adopt a Mitigated Negative Declaration were distributed to the California Governor's Office of Land Use and Climate Innovation, State Clearinghouse. Appendix E of this Final IS/MND contains the comments received on the Draft IS/MND and responses to those comments.

Text Revisions to the IS/MND

In some cases, comments received on the Draft IS/MND prompted changes that are reflected herein. Revisions have been made to clarify text, as appropriate, throughout the document in response to the comments received during the public review period. These changes are detailed in a strikeout/underline format. New or additional text is presented in underline; deleted text is presented in strikeout. Consistent with CEQA Guidelines Section 15073.5(c), none of these revisions constitute substantial revisions that would require recirculation of the document. In addition to the revisions to the Final IS/MND, Appendix B: Biological Resources Assessment, was revised based on comments received during public review.

Responses to Comments

A total of four comment letters were received on the Draft IS/MND, as shown in Table 1-1, Comments Received on the Draft IS/MND. Each letter has been assigned a number code, and individual comments in each letter have also been coded to facilitate the responses. For example, the letter from the California Department of Conservation is identified as Comment Letter 1, with the comments noted as 1-1 and 1-2. Copies of each comment letter are provided prior to the response to each letter. Comments that raise issues not directly related to the substance of the environmental analysis in the IS/MND are noted but, in accordance with CEQA, did not receive a detailed response. The comments and associated responses are arranged by the date and time of comment letter receipt. Each comment within the letters has been numbered and is addressed in the response that directly follows the comment letter. The comment letters and responses are included in Appendix E of this Final IS/MND.

Table 1-1
Comments Received on the Draft IS/MND

Letter #	Agency/Interested Party	Date	Page # of Response
State and Regional Agencies			
1	California Department of Conservation	June 15, 2026	E-1
2	California Department of Fish and Wildlife	July 6, 2026	E-10
3	San Joaquin Valley Air Pollution Control District	July 8, 2026	E-16
Organizations			
4	Defenders of Wildlife	July 15, 2026	E-22

1.7 Project Location and Setting

California State University, Bakersfield

The CSUB campus is located within the governmental jurisdictional boundary of the City of Bakersfield, in central Kern County, California. The City of Bakersfield is bordered by the City of Shafter on the northwest and by unincorporated Kern County on all other sides. The CSUB campus encompasses 375 acres and is generally bounded by Stockdale Highway on the north, the Arvin-Edison Canal on the east, Camino Media on the south, and CSUB Way, undeveloped land, and a commercial parking lot on the west. Figure 1 shows the regional location of the CSUB campus.

Project Site

The project site is centrally located along the eastern boundary of the campus and encompasses an approximately 15-acre area. The project site is bounded on the north by Kroll Way and student housing; on the east by the Arvin-Edison Canal and a power transmission line easement; and on the west and south by undeveloped campus land, including open fields and the designated Environmental Studies Area (ESA) (Facility #42 on the campus map). The ESA is a fenced 20-acre area of former cropland that is an official CSU research center (also known as a field station), established in 1975 and managed by the CSUB Biology Department. Ten acres of the ESA are maintained in a natural state; the ESA is used by faculty and students for teaching and research about the environment.

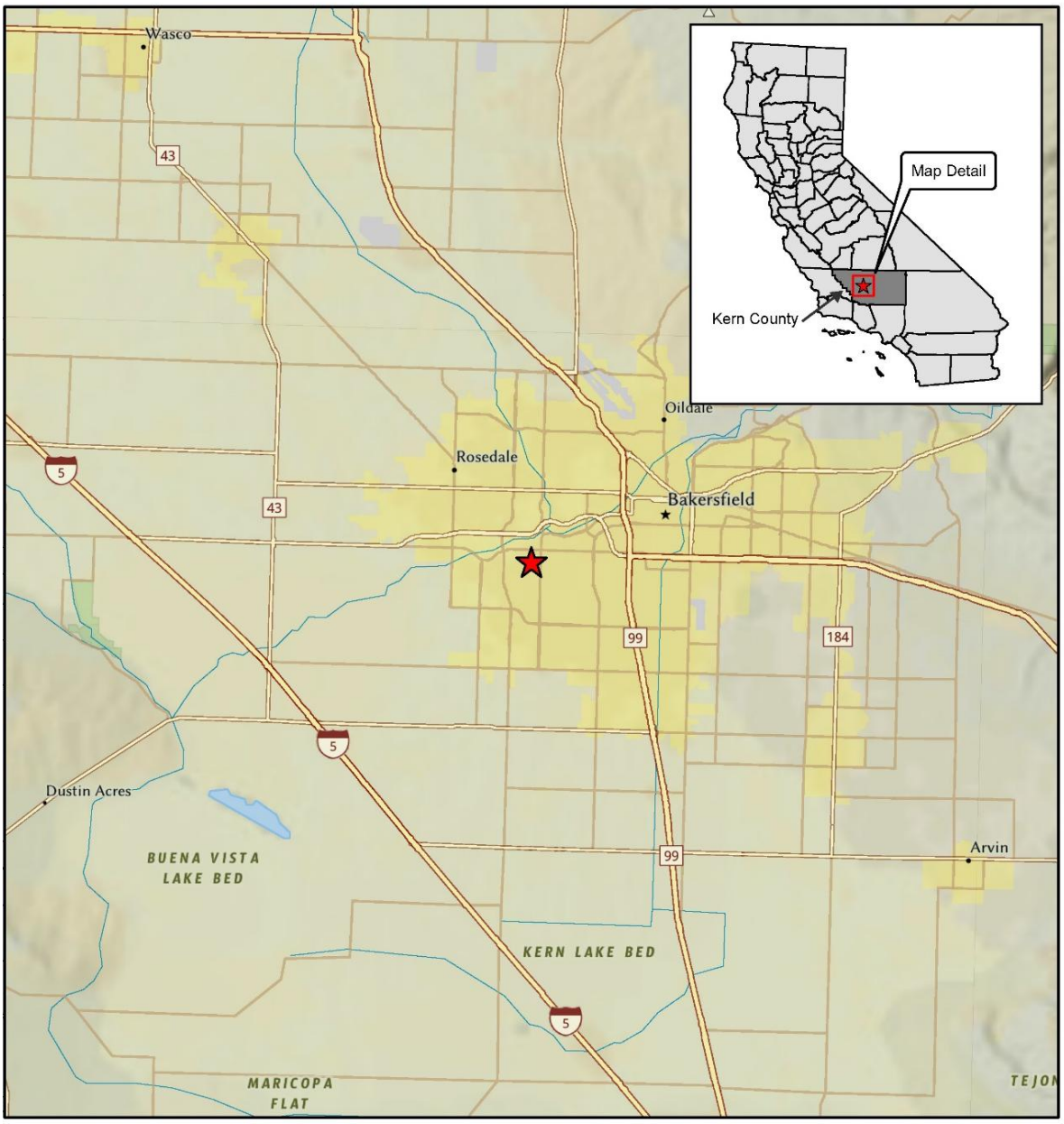
The project site is currently undeveloped and unpaved except for a soccer field and dirt access roads that transect portions of the site. The site has existing underground utilities and irrigation infrastructure and undergoes occasional maintenance activities such as vegetation trimming and tilling. The southernmost portion of the project site, south of the soccer field, overlaps less than 2 acres of the 20-acre ESA. Two intramural baseball fields are planned for the project site under the approved CSUB Campus Master Plan; however, other athletic facilities have been constructed on campus, and the intramural fields are no longer needed in their original planned locations within the current project site boundary.

Figure 2 shows the location of the project site within the CSUB campus boundaries. The current campus map and legend are shown in Figure 3, and Figure 4 shows the proposed campus map and legend with the proposed project. Figure 5 shows a detailed view of the project site, and

Figure 6 includes points that show the location and direction of photos 1 through 6 of the project site and surrounding area.

Surrounding Community

The CSUB campus is surrounded by Kern River to the north across the Stockdale Highway, low-density residential neighborhoods to the east across the Arvin-Edison Canal and a transmission right-of-way, and commercial and office development to the west and south.



Legend

Project Location

Michael Baker INTERNATIONAL

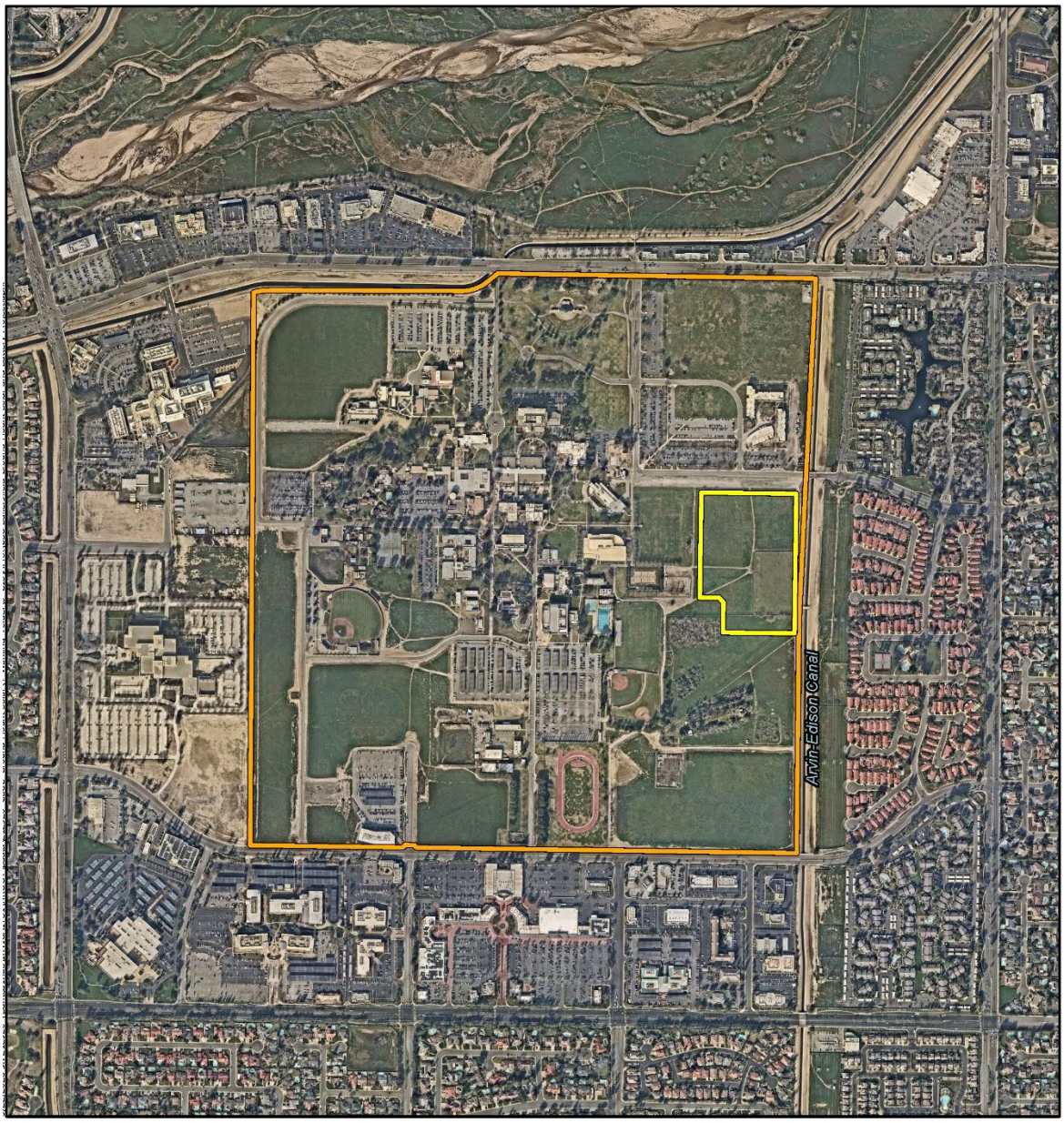
0 2.5 5 Miles

Source: Esri, ArcGIS Online, USGS, Kern County

CALIFORNIA STATE UNIVERSITY, BAKERSFIELD
GROUND MOUNT SOLAR AND BATTERY PROJECT

Regional Location Map

Figure 1



Legend

Project Site

CSU Bakersfield Boundary

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0 500 1,000 US Feet

Source: Esri, ArcGIS Online, California State University Bakersfield, Kern County, 2026 Nearmap Imagery

CALIFORNIA STATE UNIVERSITY, BAKERSFIELD
GROUND MOUNT SOLAR AND BATTERY PROJECT

Project Location Map

Figure 2

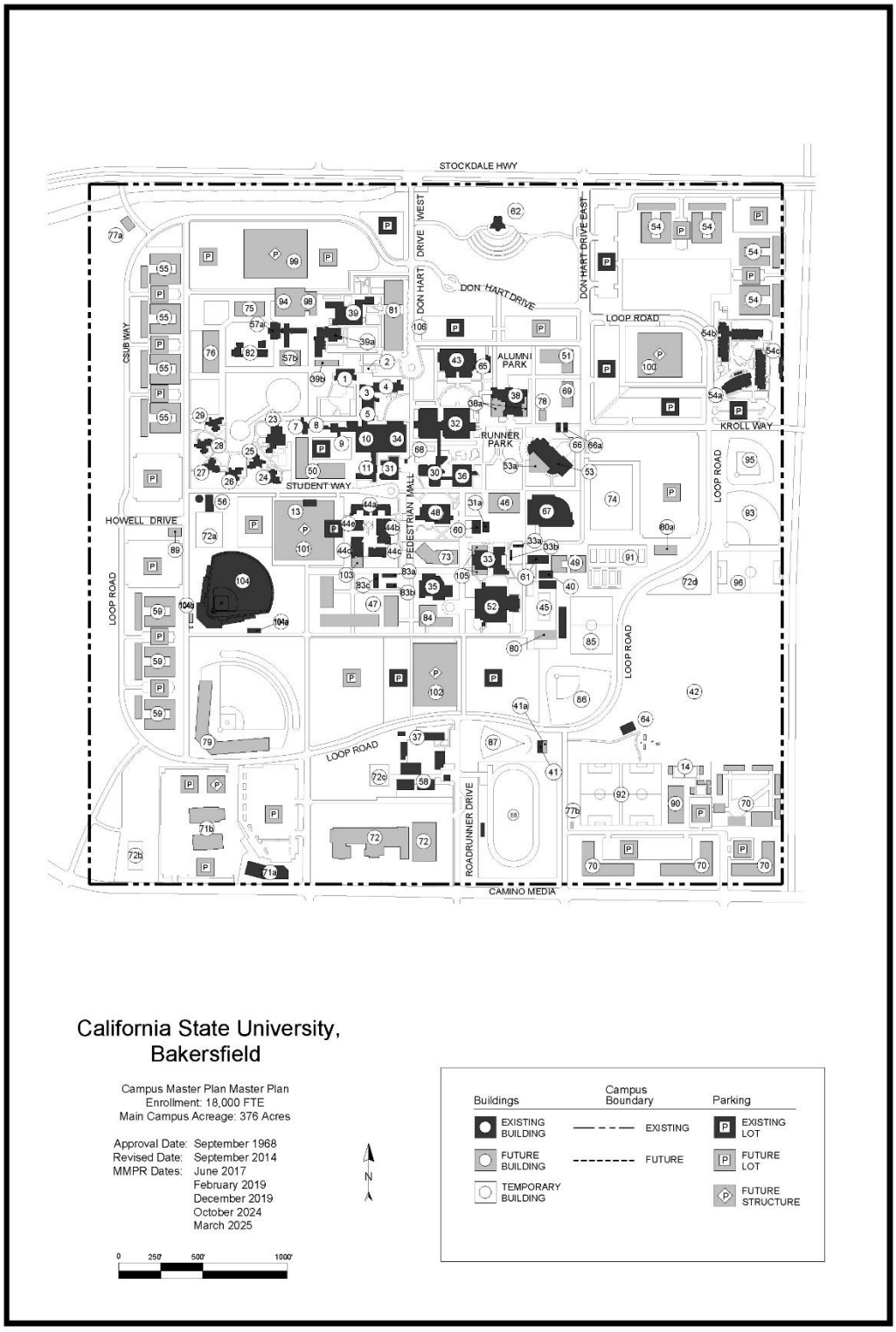
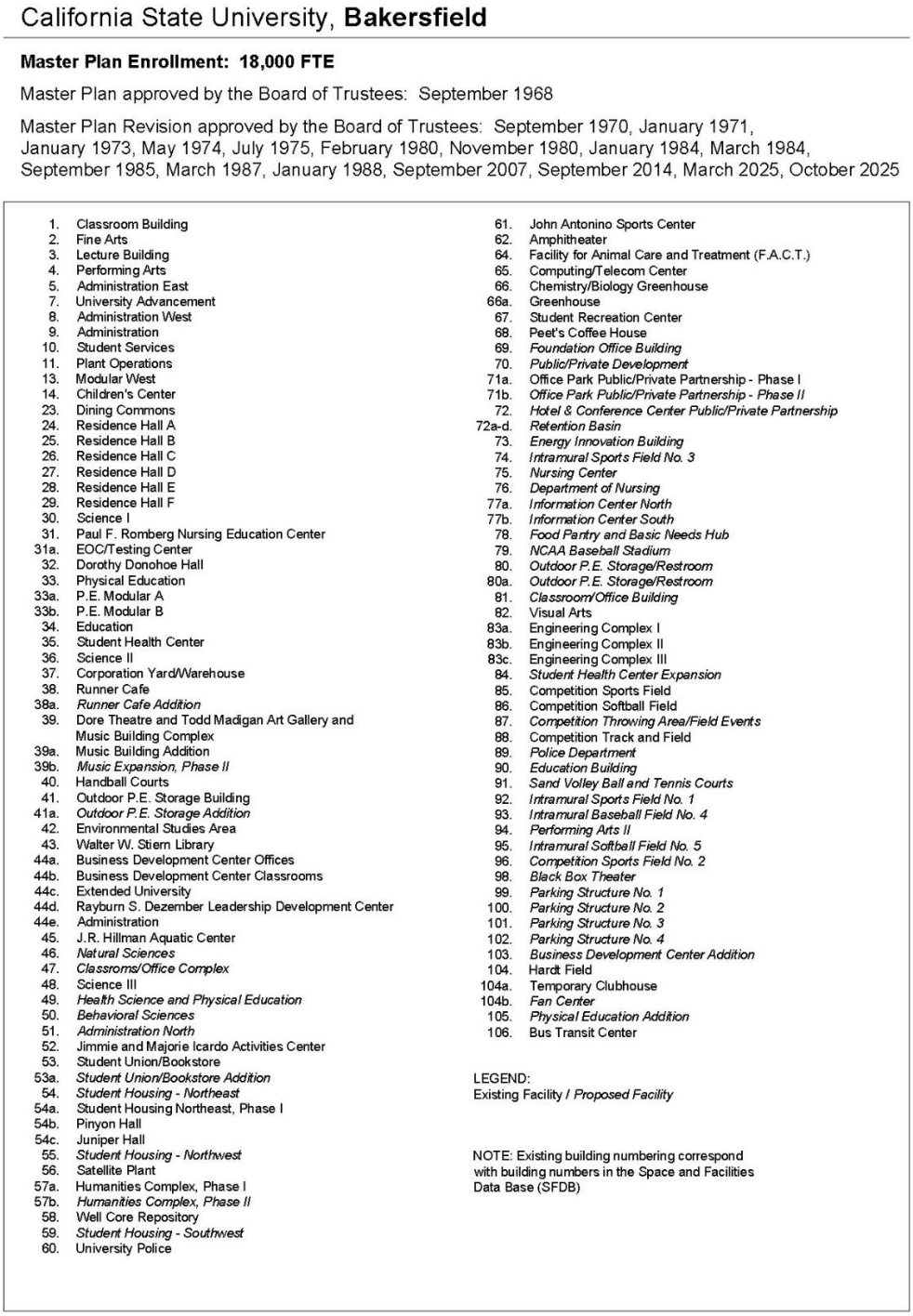


Figure 3: Existing Campus Map



California State University, **Bakersfield**

Master Plan Enrollment: 18,000 FTE

Master Plan approved by the Board of Trustees: September 1968

Master Plan Revision approved by the Board of Trustees: September 1970, January 1971, January 1973, May 1974, July 1975, February 1980, November 1980, January 1984, March 1984, September 1985, March 1987, January 1988, September 2007, September 2014, March 2025, October 2025

1. Classroom Building
2. Fine Arts
3. Lecture Building
4. Performing Arts
5. Administration East
7. University Advancement
8. Administration West
9. Administration
10. Student Services
11. Plant Operations
13. Modular West
14. Children's Center
23. Dining Commons
24. Residence Hall A
25. Residence Hall B
26. Residence Hall C
27. Residence Hall D
28. Residence Hall E
29. Residence Hall F
30. Science I
31. Paul F. Romberg Nursing Education Center
31a. EOC/Testing Center
32. Dorothy Donohoe Hall
33. Physical Education
33a. P.E. Modular A
33b. P.E. Modular B
34. Education
35. Student Health Center
36. Science II
37. Corporation Yard/Warehouse
38. Runner Cafe
38a. *Runner Cafe Addition*
39. Dore Theatre and Todd Madigan Art Gallery and Music Building Complex
39a. Music Building Addition
39b. *Music Expansion, Phase II*
40. Handball Courts
41. Outdoor P.E. Storage Building
41a. *Outdoor P.E. Storage Addition*
42. Environmental Studies Area
43. Walter W. Stiern Library
44a. Business Development Center Offices
44b. Business Development Center Classrooms
44c. Extended University
44d. Rayburn S. Dezember Leadership Development Center
44e. Administration
45. J.R. Hillman Aquatic Center
46. *Natural Sciences*
47. *Classroms/Office Complex*
48. Science III
49. *Health Science and Physical Education*
50. *Behavioral Sciences*
51. *Administration North*
52. Jimmie and Majorie Icardo Activities Center
53. Student Union/Bookstore
53a. *Student Union/Bookstore Addition*
54. *Student Housing - Northeast*
54a. Student Housing Northeast, Phase I
54b. Pinyon Hall
54c. Juniper Hall
55. *Student Housing - Northwest*
56. Satellite Plant
57a. Humanities Complex, Phase I
57b. *Humanities Complex, Phase II*
58. Well Core Repository
59. *Student Housing - Southwest*
60. University Police
61. John Antonino Sports Center
62. Amphitheater
64. Facility for Animal Care and Treatment (F.A.C.T.)
65. Computing/Telecom Center
66. Chemistry/Biology Greenhouse
66a. Greenhouse
67. Student Recreation Center
68. Peet's Coffee House
69. *Foundation Office Building*
70. *Public/Private Development*
71a. Office Park Public/Private Partnership - Phase I
71b. *Office Park Public/Private Partnership - Phase II*
72. *Hotel & Conference Center Public/Private Partnership*
72a-d. *Retention Basin*
73. *Energy Innovation Building*
74. *Intramural Sports Field No. 3*
75. *Nursing Center*
76. *Department of Nursing*
77a. *Information Center North*
77b. *Information Center South*
78. *Food Pantry and Basic Needs Hub*
79. *NCAA Baseball Stadium*
80. *Outdoor P.E. Storage/Restroom*
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81. *Classroom/Office Building*
82. Visual Arts
83a. Engineering Complex I
83b. Engineering Complex II
83c. Engineering Complex III
84. *Student Health Center Expansion*
85. Competition Sports Field
86. Competition Softball Field
87. *Competition Throwing Area/Field Events*
88. Competition Track and Field
89. *Police Department*
90. *Education Building*
91. *Sand Volley Ball and Tennis Courts*
92. *Intramural Sports Field No. 1*
93. *Intramural Baseball Field No. 4*
94. *Performing Arts II*
95. *Intramural Softball Field No. 5*
96. *Competition Sports Field No. 2*
98. *Black Box Theater*
99. *Parking Structure No. 1*
100. *Parking Structure No. 2*
101. *Parking Structure No. 3*
102. *Parking Structure No. 4*
103. *Business Development Center Addition*
104. Hardt Field
104a. Temporary Clubhouse
104b. *Fan Center*
105. *Physical Education Addition*
106. Bus Transit Center

LEGEND:
Existing Facility / *Proposed Facility*

NOTE: Existing building numbering correspond with building numbers in the Space and Facilities Data Base (SFDB)

Figure 3: Existing Campus Map Legend

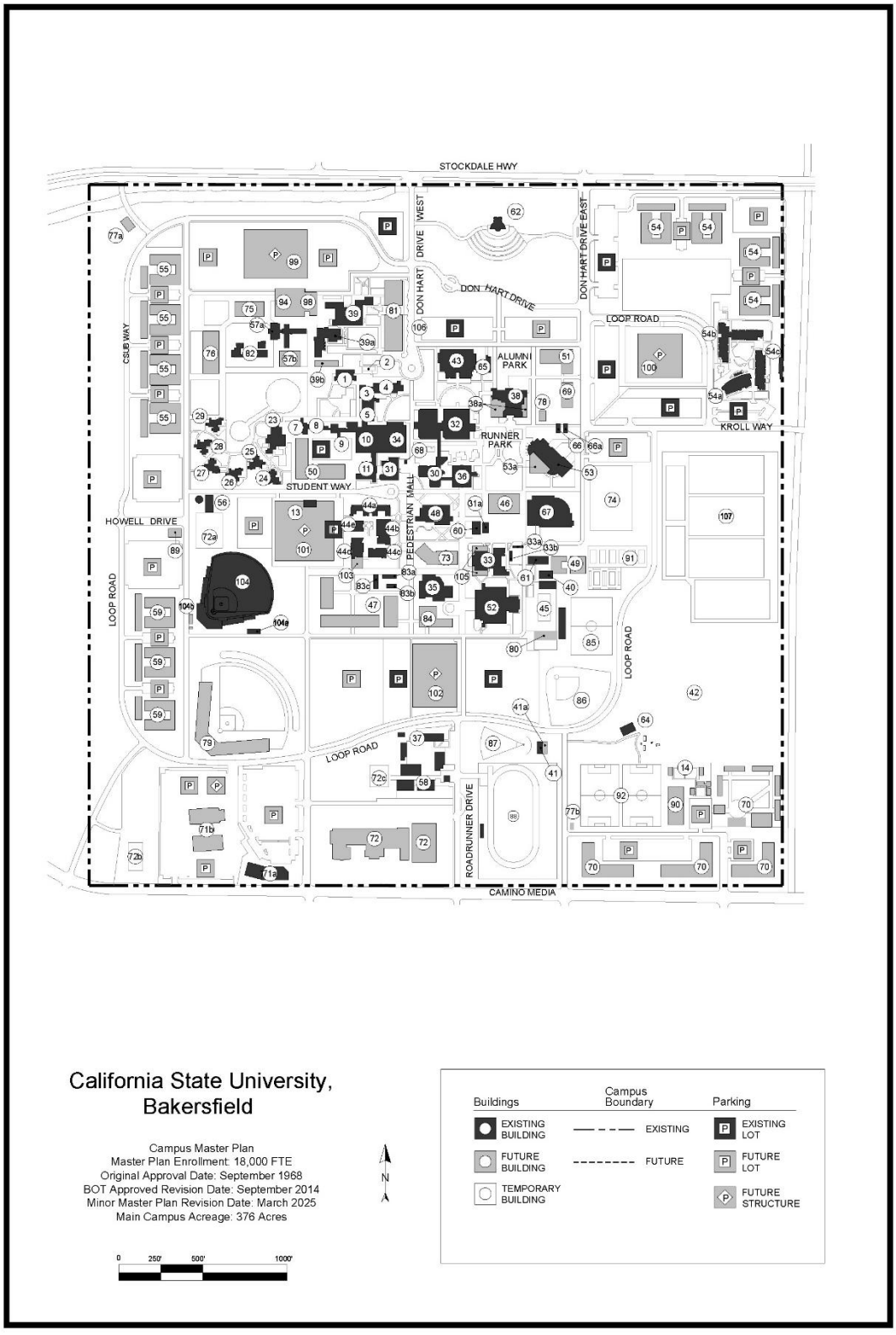
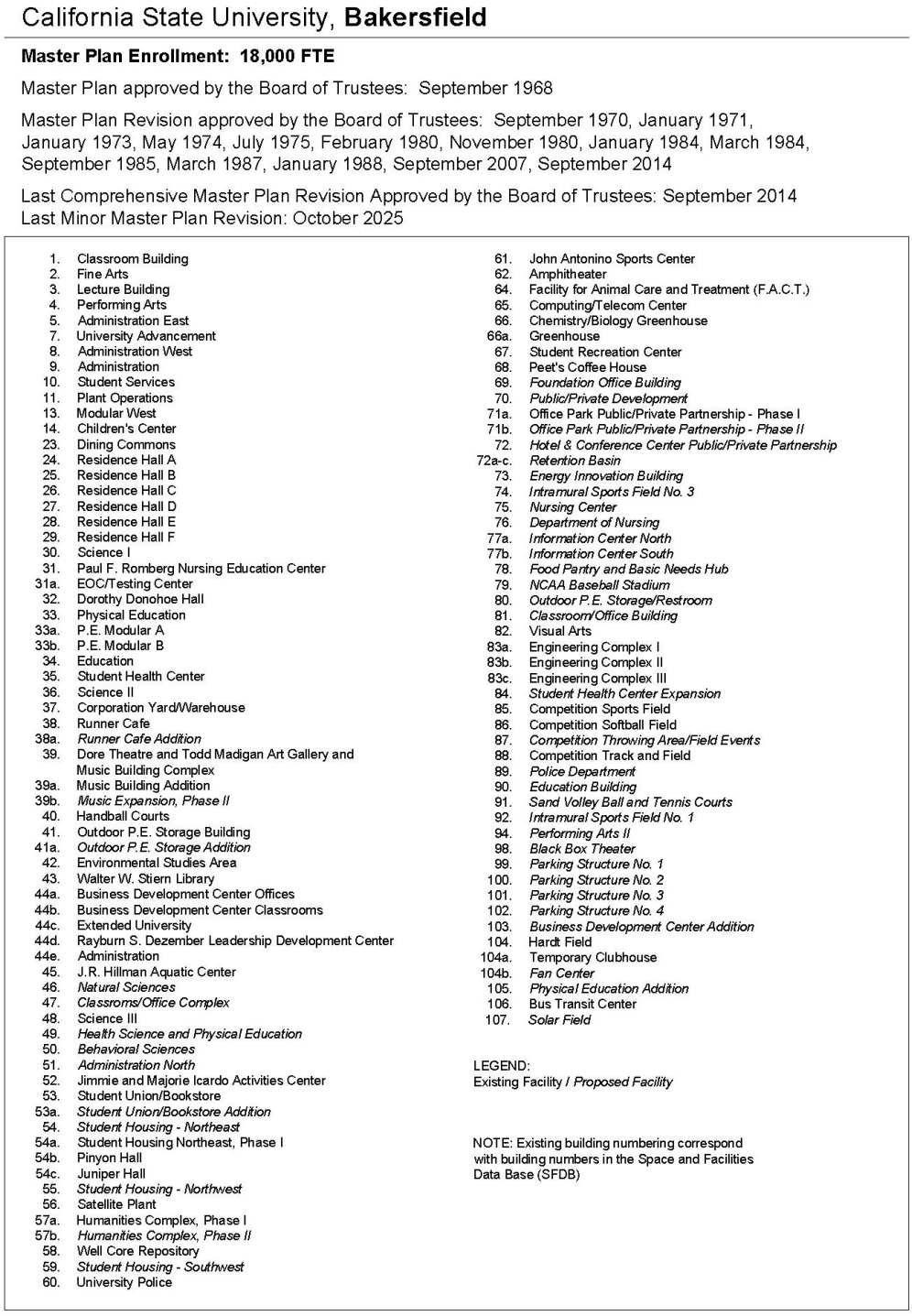


Figure 4: Proposed Campus Map



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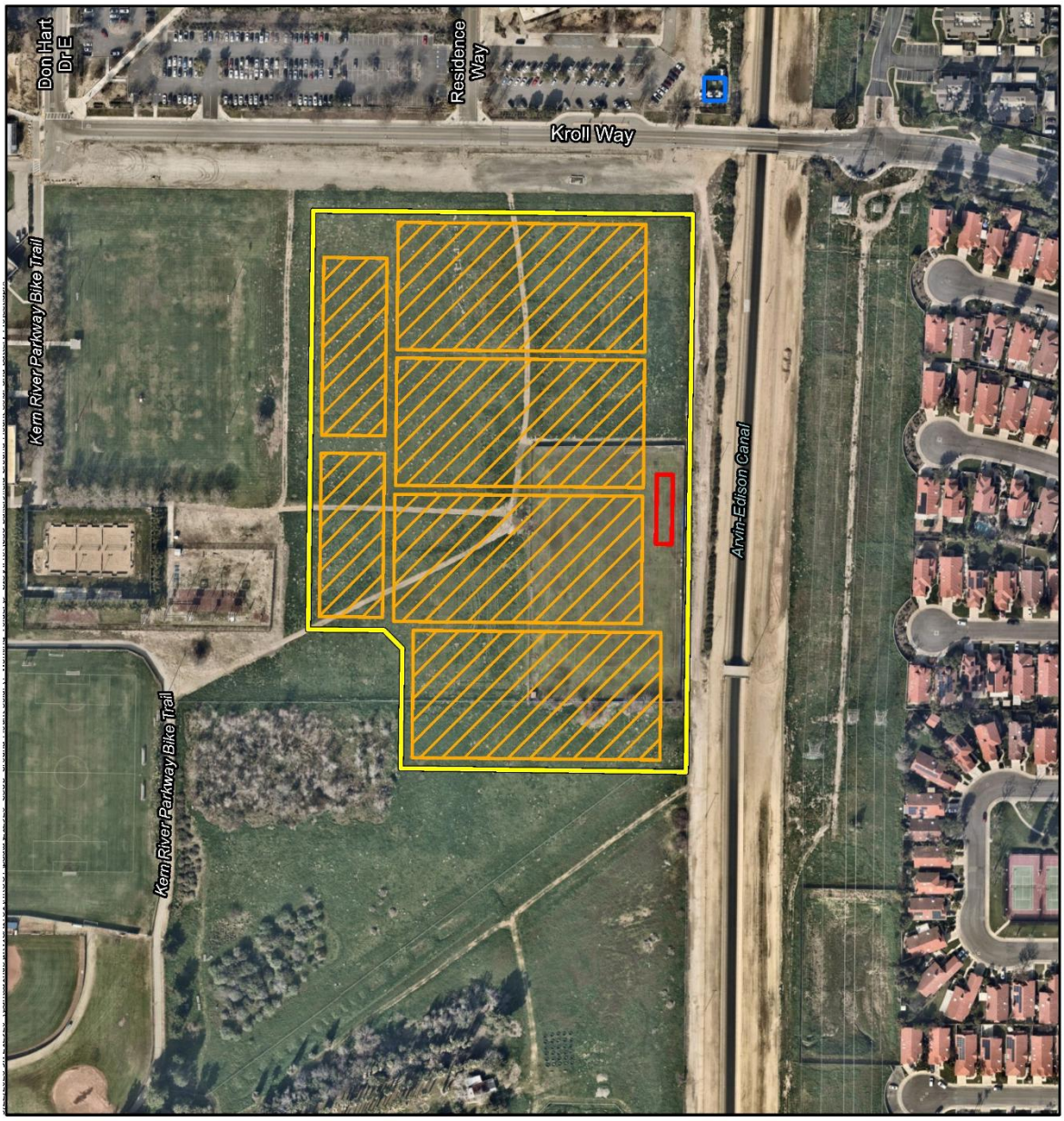
Last Comprehensive Master Plan Revision Approved by the Board of Trustees: September 2014
Last Minor Master Plan Revision: October 2025

1. Classroom Building
2. Fine Arts
3. Lecture Building
4. Performing Arts
5. Administration East
7. University Advancement
8. Administration West
9. Administration
10. Student Services
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104a. Temporary Clubhouse
104b. *Fan Center*
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106. Bus Transit Center
107. *Solar Field*

LEGEND:
Existing Facility / *Proposed Facility*

NOTE: Existing building numbering correspond with building numbers in the Space and Facilities Data Base (SFDB)

Figure 4: Proposed Campus Map Legend



Legend

- Project Site
- Battery and Electrical Components
- Ground Mount Solar
- Existing Substation

CALIFORNIA STATE UNIVERSITY, BAKERSFIELD
GROUND MOUNT SOLAR AND BATTERY PROJECT

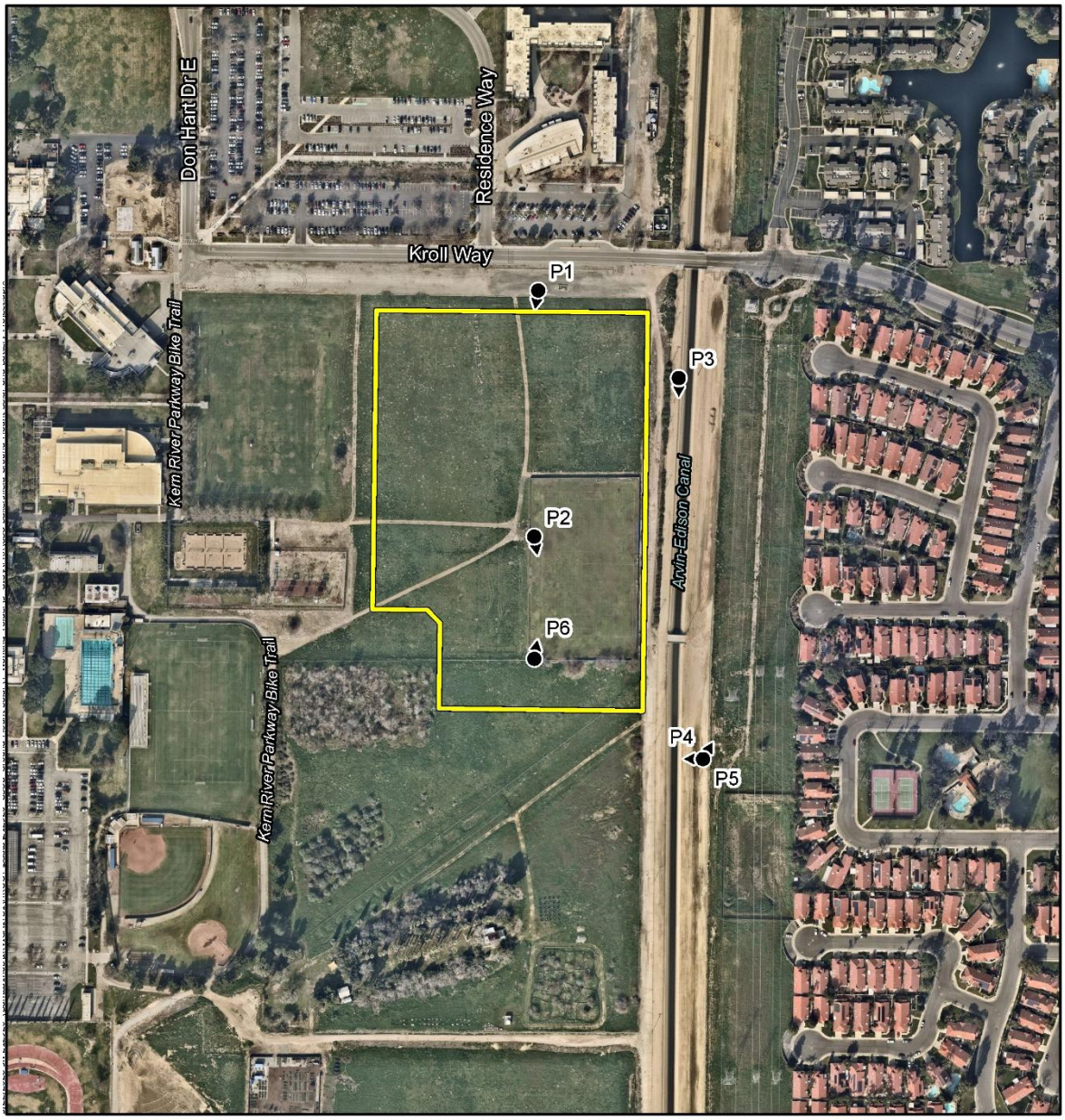
Michael Baker INTERNATIONAL

0 125 250 Feet

Source: Esri, ArcGIS Online, California State University Bakersfield, Kern County, 2026 Nearmap Imagery

Project Site

Figure 5



CALIFORNIA STATE UNIVERSITY, BAKERSFIELD
GROUND MOUNT SOLAR AND BATTERY PROJECT

Photo Point Map and Photos of Project Site and Surrounding Land Uses

Figure 6



Photo 1: South-facing view from the northern perimeter of the project site



Photo 2: South-facing view from the center of the project site, at the western portion of the practice soccer field



Photo 3: South-facing view of the Arvin-Edison Canal from outside and east of the project site



Photo 4: Northeast-facing view of residences from outside and east of the project site



Photo 5: West-facing view of the project site from outside and east of the project site



Photo 6: North-facing view from the center of the project site, at the southwest corner of the soccer field

1.8 Description of the Project

The proposed project would install a solar energy system consisting of ground-mounted solar panels and modules, underground conduit, associated electrical components, a BESS, and security features, as described in greater detail below. The system would connect to an existing substation within the campus to the north of the project site across Kroll Way, which in turn ties into the PG&E grid system.

Solar Energy System

The 4.55 MWdc solar energy system would consist of solar panel modules installed primarily on tracker mount systems, which would allow the solar panels to follow the sun's movement across the sky. The solar panels along the western portion of the project site would be installed as a south-facing fixed tilt system. Approximately 6,500 solar panels would be manufactured off-site and transported to the project site. Solar panel modules and tracker mount systems would be installed on posts approximately 5 feet above ground for a total maximum height of 9 feet. The system would be installed on piles that are driven into the ground to depths of up to 6 feet and supports would be bolted onto the piles. Approximately 1,275 posts would be installed to support the solar panels. The solar panels would be designed to minimize glare using an anti-reflective coating.

Conduit would connect the solar energy system to the electrical components within the project site. Approximately 960 linear feet of conduit would be installed underground for the inverter alternating current (AC) cables, which would consist of trenching to depths of approximately 3 feet deep by 2 feet wide. DC cables would be located on hangers and consist of above-ground cable management.

Figure 7 shows an example of a solar energy system over open ground.



Figure 7: Example of Solar PV Array Over Open Ground

Electrical Components

Electrical components that would be installed as part of the project include inverters, an AC combiner, transformers, and a control panel. Up to 10 inverters would be installed, which would convert DC electricity generated by the solar panels into usable AC electricity. Inverters would be connected to the solar energy system via underground conduit and would be located adjacent to the solar panel modules, with approximately 650 modules per inverter.

The AC combiner, transformers and switchgear, and control panel would be located on an approximately 3,510-square-foot concrete pad located along the eastern boundary of the project site. The AC combiner would combine the electricity from the 10 inverters. A 3.75 megavolt-ampere (MVA) solar transformer would step up the AC electricity from the inverters to higher voltages to connect to the existing grid. A 3.75 MVA battery transformer would adjust voltage from the BESS, as needed. The control panel would include controls to monitor, manage, and analyze the system, including hardware and software for Supervisory Control and Data Acquisition (SCADA), the solar tracker, and fire protection. The system would connect to the existing substation north of the project site, which would tie into the PG&E grid system via an underground 21-kilovolt, 825 linear foot power line.

Battery Energy Storage System

The project would install a lithium-ion BESS with an energy capacity of 11.7 MWh. The BESS would be located on the eastern portion of the project site on the concrete pad, in the same area as the AC combiner, transformers, and control panel. The BESS would come in a prefabricated enclosure unit, which would contain the lithium-ion batteries, and have a fire rating in compliance with industry standards.

Access, Security, and Lighting

The proposed project would include security features, including perimeter fencing, access gates, and lighting. The perimeter fence would be up to 4,000 linear feet, approximately seven-feet high with barbed wire, and have four access gates. The proposed perimeter fence would be designed to allow small- to medium- sized wildlife to pass underneath~~through~~culverts. Security lighting would be installed at the equipment station. Lighting would be shielded and downward-facing to avoid light pollution and limit trespass outside of the project site. The perimeter fence would also include solar and battery powered lighting.

Primary access to the project site would be via a gate on the north side, along Kroll Way. The proposed project would also include four fire roads along the perimeter of the site. The fire roads on three sides of the project site would be 20-feet wide and consist of existing natural grade dirt, and the eastern side would be 25-feet wide and comprise approximately 6,000 square feet of gravel. No improvements to existing off-site roadways for access would be required.

1.9 Project Construction

Construction of the proposed project would occur over an approximately eight-month period between October 2026 and December 2027, at which point the project would be operational. CSUB is an entity of the CSU, a state agency, and the campus is state-owned property; therefore, development on the campus is not subject to local plans, policies, regulations, or ordinances. However, construction activities are anticipated to occur between the hours of 6:00 a.m. and dusk. Monday through Friday, conforming to the City of Bakersfield Noise Ordinance. No work outside of these hours is anticipated.

Construction parking, equipment staging, and laydown areas would be located within the project site and in the gravel parking lot, adjacent to the site on the north. If needed, two additional staging and laydown areas could be used on campus, north of Parking Lot E and east of the Hardt Field baseball diamond. Construction vehicles would access the campus from Stockdale Highway, then travel south on Don Hart Dr. E and east on Kroll Way to reach the project site.

Construction would occur in three phases, including site preparation, pile driving and assembly of racking and modules, and electrical wiring. Site preparation activities would take approximately five weeks to complete and would include vegetation removal, demolition of the soccer practice field fence, removal and/or capping of existing irrigation lines, installation of the perimeter fence posts and fencing, installation of the gravel access road, and minimal grading and compaction to accommodate the placement of the solar PV arrays and equipment pads, including the pad for the BESS. Approximately 350 10-inch diameter fence posts would be installed to a depth of 3 feet. Access road installation would include the installation of approximately 25,000 square feet, or 772 cubic yards, of gravel for one of the access roads. Approximately 43 haul truck trips would be required to import gravel. Several non-native trees located south of the soccer field would also be removed as part of site preparation. Temporary erosion control measures would be implemented in accordance with the required Stormwater Pollution Prevention Plan (SWPPP) that would be prepared for and approved by the Central Valley Regional Water Quality Control Board. The equipment required for site preparation includes a rubber-tired dozer, grader, roller, rubber-tired loader, and tractor/loader/backhoe. Approximately 55 delivery trucks would be required. Up to 10 construction workers would be on-site at any one time during site preparation.

After site preparation, the posts for the solar panels would be installed, racking assembled, and modules mounted. The approximately 1,275 posts would be driven to a maximum depth of 7 feet. This phase of construction would take approximately eight weeks to complete. The equipment required for pile driving includes a pile driver, telehandler, truck with low flatbed, crane, forklift and rough terrain forklift, and tractor/loader/backhoe. Up to 8 construction workers would be on-site during this phase.

The final phase of construction would take approximately eight weeks to complete and would include electrical wiring, testing, and commissioning. Approximately 960 linear feet of conduit would be trenched from the equipment pad to inverters. Conduit would also be installed by boring from the equipment pad to the existing CSUB substation. Minor compaction of existing soils on-site would be required to create the raised pad for the electrical equipment. Electrical equipment, including the batteries and power block, would be installed. The equipment required for the installation of the solar PV system includes an air compressor, telehandler, truck with low flatbed, crane, forklift and rough terrain forklift, and tractor/loader/backhoe. Approximately 10 delivery truck trips and up to 8 construction workers would be required.

1.10 Project Operation

The solar energy system would be controlled, monitored, managed, and analyzed remotely using the SCADA system. Operation of the proposed project would be automated and unstaffed.

An existing off-site campus operations center would continuously monitor the production and condition of the system. The operations center would dispatch maintenance staff to the site on an as-needed basis. In the event of a system alarm or identified system health issue, additional maintenance may be required. It is not anticipated that any new personnel would be required to

operate the proposed project.

The project site currently consists of primarily non-native grasslands, and these grasses are expected to regrow following the installation of the solar panels. Occasional vegetation management and maintenance of the electrical components would be required to maintain safe operation. Periodic washing of the solar PV panels to remove debris and improve energy production would be required up to two times per year. Washing would require temporary staffing on-site and use of a water truck. The project would not include on-site restroom facilities, and therefore no wastewater would be generated during project operation. Additionally, the project would not generate daily water demand, as water required during operational activities would be delivered to the project site via water trucks, as needed.

1.11 Project Decommissioning

Typical solar systems have an anticipated operational lifetime of 30 to 40 years, after which the equipment owner may decommission the project based on further discretionary review. It is anticipated that during project decommissioning, the panels, poles, electrical components, and BESS would be removed. Currently, standard decommissioning practices include repurposing, salvaging/recycling, or disposing of the solar components. However, actual decommissioning and site restoration for the project would be conducted in accordance with all applicable requirements in effect at the time of project decommissioning, and a final decommissioning plan, based on then-current technology, site conditions, and regulations, would be prepared prior to actual decommissioning. The need for supplemental environmental review would be assessed at the time decommissioning is proposed based on then-current planning and environmental regulations.

1.12 Required Permits and Approvals

Permits and other use authorizations that may be required to implement the project may include, but are not limited to, the following:

California State University, Board of Trustees

- Approval and adoption of the CEQA environmental document

CSU Office of Capital Planning, Design & Construction

- Administrative Project Approvals by CSU Board of Trustees
- Plan Review (Fire and Life Safety) by the CSU Office of Fire Safety (OFS)

Central Valley Regional Water Quality Control Board

- Stormwater Pollution Prevention Plan

2.0 ENVIRONMENTAL DETERMINATION

2.1 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation/Traffic	☐ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

2.2 Environmental Determination

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in 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 "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Kristine De Young (Oct 16, 2026 15:44:35 PDT)
Signature

Oct 16, 2026
Date

Kristine E De Young, MPA, Associate Vice President,
Capital and Facilities Management Services
California State University, Bakersfield

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3.0 ENVIRONMENTAL IMPACT ASSESSMENT

3.1 Aesthetics

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

a) Except as provided in Public Resources Code Section 21099, would the project have a substantial adverse effect on a scenic vista?

No Impact. Scenic vistas are generally defined as panoramic public views to various natural features, including large water bodies or striking or unusual natural terrain, or unique urban or historic features. Based on a review of the Metropolitan Bakersfield General Plan, there are no scenic viewshed areas, scenic recreational areas, and/or scenic vantage points in the vicinity of the project site. Mountain ridgelines are not visible from the project site. Additionally, the project site, and the entire CSUB campus, are not within the scenic resource areas identified by the City of Bakersfield.[1] The Kern River and Kern River Parkway open space area are located to the north of the CSUB campus, across Stockdale Highway, approximately 0.3-miles north of the project site, and are not visible from the project site. Intervening structures include the CSUB Student Housing East complex to the north across Kroll Way (maximum height of approximately four stories), commercial uses further north adjacent to Stockdale Highway (up to approximately three stories), and mature trees. While the proposed development would introduce new infrastructure on an undeveloped site, such features would not be visible from any scenic vistas or protected view corridors. Therefore, the proposed project would not have an adverse effect on a scenic vista, and no impact would occur.

b) Except as provided in Public Resources Code Section 21099, would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The California Department of Transportation (Caltrans) designates scenic highways

[1] California State University, Bakersfield, 2007, Draft Environmental Impact Report, Campus Master Plan Update, State Clearinghouse No. 2006111133.

through the State Scenic Highway System. The project site is not located adjacent to or near any officially designated, or potentially eligible, scenic highways.[2] The nearest section of state scenic highway, which is identified as eligible for listing, is State Route 166 (SR-166), located over 20 miles to the south. As such, the project site is not visible from the eligible portion of SR-166. Therefore, the proposed project would not damage scenic resources within a state scenic highway, and no impact would occur.

c) Except as provided in Public Resources Code Section 21099, would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact. The project site is located in the developed CSUB campus, within the urbanized setting of the City of Bakersfield. As such, the analysis below addresses the project's potential to conflict with applicable zoning and other regulations governing scenic quality.

CSUB is an entity of the CSU, and the campus is state-owned property. Therefore, campus development is not subject to local planning or land use regulations. Instead, campus development is required to comply with the design guidelines, development standards, and other development assumptions set forth in the CSUB Campus Master Plan, and other official adopted CSU and campus policies governing land use.

The CSUB Campus Master Plan addresses a number of issues related to the campus's functional and visual environment; however, the objectives in the CSUB Campus Master Plan related to scenic quality are programmatic and are not applicable to the proposed project. All campuses within the CSU system are required to meet the Design Guidelines, Standards, and Forms at the time of project submittal.[3] Such requirements include consistency with Title 24 of the California Code of Regulations (CCR), *California Building Code Standards*. Title 24 of the CCR codifies the California Building Code (CBC) as Part 2, and the California Green Building Standards Code (CALGreen) as part 11. Adherence to the CBC and CALGreen would ensure that the design, construction, and materials used for the development of the proposed project are consistent with the standards required by CSU. Additionally, CSU enforces its own *Outdoor Lighting Design Guide*, which provides standards for vertical surface brightness, wayfinding, glaze minimization, uniformity, and light pollution, among other standards, to ensure that outdoor lighting complements and is integrated with the campus aesthetic.[4] These standards are formulated based on Title 24 of the CCR as well as the California Energy Code. Refer to Section 3.1(d) below for further analysis regarding the project's impacts on light and glare; overall, the project would be consistent with the design guidelines, as required by CSU.

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[2] California Department of Transportation, Statewide Scenic Highway Map, available at: https://experience.arcgis.com/experience/47e2009986264718a5a13a2c81382774, accessed March 2, 2026.

[3] California State University, References – Design Guidelines, Standards, and Forms, available at: https://www.calstate.edu/csu-system/doing-business-with-the-csu/capital-planning-design-construction/operations-center/Pages/references.aspx, accessed April 3, 2026.

[4] California State University, Office of the Chancellor, 2018, Outdoor Lighting Design Guide, available at: https://www.calstate.edu/csu-system/doing-business-with-the-csu/capital-planning-design-construction/operations-center/Documents/guidelines/Outdoor-Lighting-Design-Guide-R3-2018-12-10.pdf.

Therefore, the proposed project would be developed consistent with all applicable regulations governing scenic quality, and impacts would be less than significant.

d) Except as provided in Public Resources Code Section 21099, would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant Impact. There are two primary sources of light: light emanating from building interiors that pass through windows and light from exterior sources (i.e., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting). Depending on the location of the light source and its proximity to adjacent light sensitive uses, light introduction can be a nuisance, affecting adjacent areas and diminishing the view of the clear night sky. The project site is located within the CSUB campus, which is developed with a variety of buildings, parking areas, roadways, and walkways. Existing light sources in the project vicinity include interior and exterior lighting associated with the institutional uses of the campus, as well as nearby residential uses to the east. Light and glare caused by vehicular headlights along Kroll Way could influence lighting in the project area.

Construction

Section 9.22.050, *Noise during construction*, of the Bakersfield Municipal Code, allows construction activities to occur between 6:00 a.m. and 9:00 p.m., Monday through Friday, and between 8:00 a.m. and 9:00 p.m. on weekends. Construction activities would not occur outside of these permitted hours and would end at dusk. If needed for safety purposes, per Bakersfield Municipal Code Section 17.71.060, *Exemptions*, temporary lighting for roadway, utility, and building lighting construction is permitted. Temporary lighting would not constitute a hazard or danger to motorists or pedestrians, would not be oriented upward, and would not blink, flash, move, or revolve, consistent with Bakersfield Municipal Code Section 17.71.070, *Prohibitions*. As such, impacts related to construction lighting would be less than significant. Potential light and glare caused by construction vehicle headlights would be limited to the short-term construction phase. Construction-related lighting would be short-term and would cease upon completion. As such, impacts would be less than significant.

Operation

The proposed project would create new sources of lighting from security and perimeter lighting. However, all lighting on-site would be shielded and focused downward onto the site to prevent light spillover onto adjacent properties as required by CSU's *Outdoor Lighting Design Guide*[5] and consistent with Bakersfield Municipal Code Section 17.71.030, *[Outdoor Lighting] General standards*. Further, the solar energy system would be controlled, monitored, managed, and analyzed remotely during regular operations and generate minimal vehicular trips associated with maintenance and cleaning visits. Thus, light and glare from project-generated vehicular trips would be minimal.

The reflection of sunlight off solar PV panel surfaces would be the primary source of potential daytime glare from the project. Solar PV panels consist of many solar cells that are specifically designed to capture solar energy and convert it into usable energy. Therefore, solar PV panels are designed to be as absorptive as feasible in order to maximize the efficiency of energy

[5] California State University, Office of the Chancellor, 2018, Outdoor Lighting Design Guide, available at: https://www.calstate.edu/csu-system/doing-business-with-the-csu/capital-planning-design-construction/operations-center/Documents/guidelines/Outdoor-Lighting-Design-Guide-R3-2018-12-10.pdf.

production. Moreover, solar panels would be designed to minimize glare using an anti-reflective coating and other technological features specific to each manufacturer. Such features would minimize daytime glare from the solar panels and would not be more adverse than existing daytime reflection from existing surrounding building materials (i.e., glass, metal). Therefore, the impacts related to glare from the solar panels would be less than significant.

During nighttime hours, reflection of headlights or roadway lighting from nearby Kroll Way off solar PV panel surfaces during nighttime hours would be a secondary source of potential glare from the project. However, light sources along Kroll Way are over 120 feet from the proposed solar PV panel locations. Further, the project proposes perimeter fencing that would screen proposed panels from vehicle headlights. Therefore, the proposed project would not be a source of substantial light or glare that would adversely affect nighttime views. Impacts would be less than significant.

3.2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
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))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. According to the California Important Farmland Finder maintained by the California Department of Conservation, the project site is designated as Urban and Built-Up Land. The project site is not located on or near Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, nor does it include agricultural uses.[6] Therefore, the proposed project would not convert Farmland to non-agricultural use, and no impact would occur.

[6] California Department of Conservation, Farmland Mapping & Monitoring Program, California Important Farmland Finder Map, available at: https://maps.conservation.ca.gov/DLRP/CIFF/, accessed February 13, 2026.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The project site is primarily undeveloped and not used for agricultural activities. Additionally, no portion of the CSUB campus is zoned for agricultural use.[7] The project site is not currently under a Williamson Act contract.[8] Therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and no impact would occur.

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))?

No Impact. No portion of the CSUB campus is zoned for forest land, timberland, or Timberland Production as defined in Public Resources Code Section 12220(g) and Government Code Section 4526.[9] Therefore, the proposed project would not conflict with existing zoning for, or cause a rezoning of, forest land or timberland, and no impact would occur.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The project site is not developed for forest land, and thus, would not result in the loss or conversion of forest land. Therefore, no impact would occur.

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?

No Impact. As discussed in Sections 3.2(a) and 3.2(c), the project site is not located on land designated as Farmland or forest land, and thus, would not convert Farmland or forest land to non-agricultural or non-forest use. Therefore, no impact would occur.

[7] City of Bakersfield, Planning and Land Use Map, available at: https://cob.maps.arcgis.com/apps/webappviewer/index.html?id=9fbb25e825e3425a84e7dea631e42f7b, accessed March 12, 2026.

[8] California Department of Conservation, Williamson Act Enrollment Finder, available at: https://maps.conservation.ca.gov/dlrp/WilliamsonAct/, accessed May 12, 2026.

[9] City of Bakersfield, Planning and Land Use Map, available at: https://cob.maps.arcgis.com/apps/webappviewer/index.html?id=9fbb25e825e3425a84e7dea631e42f7b, accessed March 12, 2026.

3.3 Air Quality

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

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

Less than Significant Impact. Certain air pollutants have been recognized to cause notable health problems and consequential damage to the environment either directly, or in reaction with other pollutants, due to their presence in elevated concentrations in the atmosphere. Such pollutants have been identified and regulated as part of an overall endeavor to prevent further deterioration and to facilitate improvement in air quality. Air quality is typically characterized by ambient air concentrations of seven specific pollutants identified by the United States Environmental Protection Agency (USEPA) to be of concern with respect to the health and welfare of the general public. Federal criteria air pollutants include ground-level ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), respirable particulate matter ten microns or less in diameter (PM_{10}), fine particulate matter 2.5 microns or less in diameter ($PM_{2.5}$), and lead (Pb).

These specific pollutants, known as “criteria air pollutants,” are pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. These pollutants are common byproducts of human activities and have been documented through extensive scientific research to cause adverse health effects. The federal ambient concentration criteria are known as the National Ambient Air Quality Standards (NAAQS), and the State ambient concentration criteria are referred to as the California Ambient Air Quality Standards (CAAQS). In addition to the federal criteria pollutants, the State regulates ambient conditions of visibility-reducing particles, sulfates, hydrogen sulfide (H_2S), and vinyl chloride.

Summary of Applicable Air Quality Regulations/Standards

The federal Clean Air Act (CAA) is the comprehensive federal law that regulates air emissions in order to protect public health and welfare. The USEPA is responsible for the implementation and enforcement of the CAA, which establishes the NAAQS, specifies future dates for achieving compliance, and requires the USEPA to designate areas as attainment, nonattainment, or

maintenance. The CAA also mandates that each state submit and implement a State Implementation Plan for each criteria pollutant for which the state has not achieved the applicable NAAQS. The State Implementation Plan includes pollution control measures that demonstrate how the standards for those pollutants will be met.

The primary State legislation addressing air quality in California is the California Clean Air Act (CCAA). The CCAA is administered by the California Air Resources Board (CARB) at the state level and by the air quality management districts at the regional and local levels. The CCAA requires all areas of the state to achieve and maintain the CAAQS by the earliest feasible date. The project site is located within the San Joaquin Valley Air Basin (SJVAB), which includes eight counties in California's Central Valley: Fresno, Kern (western and central), Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare. Air pollution from significant anthropogenic activities in the SJVAB includes a variety of industrial-based sources as well as on- and off-road mobile sources. The San Joaquin Valley Air Pollution Control District (SJVAPCD) acts as the regulatory agency for air pollution control in the SJVAB and is the local agency empowered to regulate air pollutant emissions. Air quality in the SJVAB currently does not meet both the NAAQS and CAAQS for O_3 and $PM_{2.5}$ and also the CAAQS for PM_{10}, and is designated as "nonattainment" for these air quality standards.

SJVAPCD has the responsibility for ensuring that the NAAQS and CAAQS are achieved and maintained for the SJVAB, which is accomplished through the development of regional emissions forecasting and implementation of effective control strategies. Failure to comply with the air quality standards on the timeline(s) established by the air quality plans puts state and local agencies at risk for penalties in the form of lawsuits, fines, a federal takeover of state implementation plans, and a loss of funds from federal agencies, such as the Federal Highway Administration and Federal Transit Administration. The SJVAPCD has developed a series of plans to attain and maintain the State and federal standards, the most relevant of which include the following:

- The 2016 Plan for the 2008 8-Hour Ozone Standard.
- The 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standard.
- The 2020 Reasonably Available Control Technology Demonstration for the 8-Hour Ozone Standard.
- The 2022 Plan for the 2015 8-Hour Ozone Standard.
- The 2024 Plan for the 2012 Annual PM2.5 Standard.

The 2019 CSU CEQA Handbook has not established significance thresholds for air quality. Therefore, SJVAPCD regulations and standards are used to assess the potential for air quality impacts. To assist in the assessment of air pollutant emissions, SJVAPCD established significance thresholds to determine whether a project may have a significant air quality impact. The SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI) states that determination of whether a project would exceed the applicable thresholds of significance for criteria pollutants requires quantification of project-specific emissions. If a project exceeds the significance threshold established for an effect, the project would be considered to have a potentially significant impact on air quality. Table 3.3-1 shows the SJVAPCD air quality significance thresholds for criteria pollutants resulting from construction and operational activities, which are expressed in terms of tons of pollutants emitted per year. The GAMAQI

states that projects with emissions that remain below the thresholds of significance for criteria pollutants would be determined to "[n]ot conflict or obstruct implementation of the SJVAPCD air quality plan."

Table 3.3-1: SJVAPCD Air Quality Thresholds of Significance

Pollutant/Precursor	Emissions (tons per year)		
	Construction	Operational	
		Permitted Equipment and Activities	Non-Permitted Equipment and Activities
CO	100	100	100
NO_X	10	10	10
ROG	10	10	10
SO_X	27	27	27
PM_{10}	15	15	15
$PM_{2.5}$	15	15	15

Source: San Joaquin Valley Air Pollution Control District, Guidance for Assessing and Mitigating Air Quality Impacts, March 19, 2025.

Construction

All activities involved in proposed project construction would be required to comply with the following SJVAPCD rules to control emissions:

- Rule 4101 (Visible Emissions)
- Rule 4102 (Nuisance)
- Rule 4201 (PM Concentration)
- Rule 4202 (PM Emission Rate)
- Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earth-moving Activities)
- Rule 8031 (Bulk Materials)
- Rule 8041 (Carryout and Trackout)
- Rule 8051 (Open Areas)
- Rule 8061 (Paved and Unpaved Roads)
- Rule 8071 (Unpaved Vehicle/Equipment Traffic Areas)
- Rule 9510 (Indirect Source Review)

Construction of the proposed project is anticipated to occur over an approximately eight-month period between October 2026 and December 2027. Construction activities would generate emissions from off-road equipment usage and on-road vehicle travel (truck hauling, vendor

deliveries, and workers commuting). Construction emissions were calculated using the California Emissions Estimator Model (CalEEMod) (Version 2022.1). CalEEMod is the preferred tool for estimating emissions that would be generated by construction and operation of CEQA projects, and is programmed with regionally-specific outputs from the Off-Road Emissions Inventory Program model (OFFROAD) and the EMission FACtor (EMFAC) on-road mobile source emissions inventory, which are emissions estimation databases developed by CARB. CalEEMod also relies upon known emissions data associated with certain activities or equipment (often referred to as "default" data, values or factors) that can be used if site-specific information is not available. The input values used for the construction schedule were adjusted to be project-specific and the equipment used was based on CalEEMod defaults. For the purposes of this analysis, CalEEMod default values were used for equipment and vehicle emission factors, equipment load factors, and vehicle trip lengths. Maximum daily emissions calculated in CalEEMod represent conservative estimates of the worst-case daily emissions in each phase of construction based on continuous equipment activity. Detailed construction data can be found in Appendix A.

Dust is typically a major concern during grading activities, also called "fugitive emissions." Fugitive dust emissions rates vary as based on many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). CalEEMod was utilized to calculate fugitive dust emissions resulting from construction activity. The proposed project would be required to comply with existing SJVAPCD rules for the reduction of fugitive dust emissions. SJVAPCD Regulation VIII, Fugitive PM_{10} Prohibitions, establishes these procedures. Compliance with this rule would be achieved through application of standard best management practices (BMPs) in construction and operation activities, such as application of water before or during earthwork and onto unpaved traffic areas, phasing work to limit dust, setting up wind fences to limit wind-blown dust, applying dust suppressants if needed, establishing vegetative cover, removal and cleanup of mud and dirt from the paved surface and shoulder, and restricting vehicle speeds on unpaved roads to 15 miles per hour.[10] These control measures were accounted for in CalEEMod as standard features under the unmitigated conditions.

Table 3.3-2 presents the total emissions that would be generated during the eight-month construction period. Although the schedule is anticipated to span between 2026 and 2027, the total quantity of emissions that would be generated during proposed project construction are compared to the SJVAPCD thresholds in Table 3.3-2 because the overall duration would be less than one year. Construction emissions would not exceed SJVAPCD thresholds, with the total amount of emissions remaining well below all of the threshold values. Therefore, construction of the proposed project would result in a less-than-significant impact related to conflict or obstruction of the implementation of the applicable air quality plans.

[10] As required by Mitigation Measure BIO-4, vehicle speeds on unpaved roads would be restricted to 5 miles per hour.

Table 3.3-2: Estimated Construction Emissions

Source	Total Pollutant Emissions (tons)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Off-Road Equipment	0.06	0.63	0.90	<0.01	0.02	0.02
Dust From Material Movement	-	-	-	-	0.02	0.01
Onsite truck	<0.01	<0.01	<0.01	<0.01	0.01	<0.01
Worker Trips	<0.01	<0.01	0.04	<0.01	0.02	<0.01
Vendor Delivery Trips	<0.01	0.01	<0.01	<0.01	<0.01	<0.01
Haul Truck Trips	<0.01	<0.01	<0.01	<0.01	0.01	<0.01
Total Construction Emissions	**0.07**	**0.65**	**0.94**	**<0.01**	**0.09**	**0.04**
Annual Threshold	100	10	10	27	15	15
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Note: Emissions modeling files can be found in Appendix A.
Source: TAHA, 2026.

Operation

Operation of the proposed project would not introduce a new substantial source of air pollutant emissions to the area that could potentially cause or contribute to an exacerbation of air quality violations directly. Implementation of the proposed project would involve the installation of a ground-mounted PV solar energy system and a BESS, which would provide on-site renewable energy generation for the CSUB campus. Operation of the proposed project would be automated and unstaffed. Maintenance of the proposed project would be infrequent and would not have the potential to substantially increase the existing traffic conditions on surrounding roadways. It is not anticipated that any new personnel would be required to operate the proposed project. There is no potential for the proposed project to generate emissions that would exceed the SJVAPCD operational significance thresholds. Therefore, the proposed project would not conflict with, or obstruct implementation of, the applicable air quality plan, and impacts would be less than significant.

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?

Less than Significant Impact. The GAMAQI recognizes that air pollution is largely a cumulative environmental impact by its nature. Regarding the magnitude of emissions from an individual project that would qualify as cumulatively considerable, the GAMAQI provides the following rationale for assessing potential impacts:

> "*[I]f project-specific emissions would be less than the thresholds of significance for criteria pollutants, as a general matter the project would not be expected to result in a cumulatively considerable net increase of any criteria pollutant for which the SJVAPCD is in nonattainment under applicable Federal or State ambient air quality standards.*" (Section 7.14)[11]

[11] San Joaquin Valley Air Pollution Control District, 2025, Guidance for Assessing and Mitigating Air Quality Impacts, available at: https://www.valleyair.org/media/g4nl3p0g/gamaqi.pdf.

Given that the SJVAPCD is currently designated as non-attainment of the NAAQS and/or CAAQS for O_3, $PM_{2.5}$, and PM_{10}, the critical pollutants to consider under this impact criterion are emissions of ozone-precursors (VOC, NO_X, and $PM_{2.5}$) and particulate matter ($PM_{2.5}$ and PM_{10}).

Construction

As shown in Table 3.3-2, O_3, $PM_{2.5}$, and PM_{10} emissions associated with the construction of the proposed project would not exceed any applicable SJVAPCD thresholds. Construction emissions would persist for less than one year and would be controlled through regulatory compliance and implementation of required BMPs. Therefore, construction of the proposed project would result in less than significant impacts related to a cumulatively considerable net increase of non-attainment pollutants.

Operation

As mentioned above, operation of the proposed project would not include a new substantial source of air pollutant emissions to the area. Maintenance activities would be infrequent and would not substantially increase vehicular traffic within the project area. There is no potential for the proposed project to exceed the thresholds of significance for any criteria pollutants. Therefore, operations of the proposed project would result in less than significant impacts related to a cumulatively considerable net increase of non-attainment pollutants.

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

Less than Significant Impact. According to the GAMAQI, sensitive receptors refer to those segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality). Land uses where sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities. Sensitive receptors in closest proximity to the project site are:

- CSUB Student Housing East located approximately 300 feet north;
- Single-family residences located 400 feet east;
- Edgewater Condominium Rentals located 460 feet northeast; and,
- The Vineyard Park located 750 feet east.

Construction

Sensitive receptors near the project site may be exposed to substantial pollutant concentrations during construction activities. Construction activities would result in short-term, project-generated emissions of criteria pollutants and diesel particulate matter (diesel PM) from the exhaust of construction vehicles and off-road, heavy-duty diesel equipment used for grading activities. As shown in Table 3.3-2, the proposed project would not exceed any SJVAPCD significance thresholds related to criteria pollutants and ozone precursors during construction. Construction activities and delivery of construction materials and equipment for the proposed project would comply with the SJVAPCD clean construction fleet standard measures and applicable rules and regulations to minimize construction emissions. In addition, mobile source emissions on the roadway network are spread across long distances, and construction-related emissions of diesel PM would not be expected to result in exposure of sensitive receptors to substantial pollutant concentrations.

With regards to toxic air contaminant (TAC) emissions, carcinogenic risks, and non-carcinogenic hazards, the use of heavy-duty construction equipment and haul trucks during construction activities would release diesel PM to the atmosphere through exhaust emissions. Diesel PM is a known carcinogen, and extended exposure to elevated concentrations of diesel PM can increase excess cancer risks in individuals. However, carcinogenic risks are typically assessed over timescales of several decades, as the carcinogenic dose response is cumulative in nature. The use of heavy-duty construction equipment for construction of the proposed project would be short-term and intermittent. Daily emissions of diesel PM would fluctuate throughout the construction period and would cease upon completion of construction. Given the temporary and short-term construction schedule, the proposed project would not result in a long-term exposure of TAC emissions as a result of construction.

Valley Fever is a special concern for construction projects within the SJVAB. The *Coccidioides immitis* fungus spores in soil, which are responsible for transmitting Valley Fever, can disperse in the air when the soil is disturbed during construction activities, and then can be inhaled into the lungs. On-site construction workers could potentially be exposed to Valley Fever from fugitive dust generated during construction of the proposed project, notably during grading and other earth-moving activities. While there are no specific thresholds for the evaluation of potential *Coccidioides immitis* exposure, the potential for workers or area receptors contracting Valley Fever as a result of the proposed project is evaluated based on the anticipated earth-moving activities, which would be limited to site surface clearing except for the pile drilling or pile driving phase. The impact assessment accounts for construction contractor compliance with SJVAPCD Rule 8021, Section 6.3, which requires development and implementation of a dust control plan to help control the release of the *Coccidioides immitis* fungus during construction activities. The dust control plan shall be submitted to and approved by the Air Pollution Control Officer prior to the commencement of proposed project construction.

Construction activities within the project site would also be subject to SJVAPCD Regulation VIII, Rules 8061 and 8071, which were promulgated to reduce ambient concentrations of PM_{10} by requiring actions to prevent, reduce, or mitigate anthropogenic fugitive dust emissions from paved/unpaved roads and unpaved vehicle/equipment traffic areas, respectively. Additionally, the construction contractor is required pursuant to Section 6709 of the Labor Code to provide effective awareness training on Valley Fever to all employees in counties where Valley Fever is highly endemic, including Kern County, where the project site is located. Precautionary BMPs to minimize potential *Coccidioides immitis* exposure include, but are not limited to: using water and/or soil stabilizers to reduce airborne dust; stabilizing all material stockpiles by tarping or other methods; providing enclosed air-conditioned carbs for vehicles/equipment that generate dust; suspending work during heavy winds; positioning workers upwind of grading, driving, and drilling activities; and avoiding the use of compressed air sweeping methods. In instances where dust exposure is unavoidable, contractors would provide NIOSH-approved respiratory protection in accordance with the State Division of Occupational Safety and Health (Cal/OSHA) Respiratory Protection Standard (8 CCR § 5144). Adherence to these provisions would ensure that the proposed project would result in less than significant impacts related exposure of sensitive receptors to substantial pollutant concentrations.

Operation

According to the GAMAQI, determination of whether project emissions would expose sensitive receptors to substantial pollutant concentrations is a function of assessing potential health risks. The GAMAQI states that there are two types of land use projects that would have the potential to cause long-term public health risk impacts, Type A Projects and Type B Projects. Type A

Projects are land use projects that will place new toxic sources in the vicinity of existing receptors. Examples of Type A projects include gasoline dispensing facilities, asphalt batch plants, warehouse distribution centers, new freeways or high traffic roads, and other station sources that emit toxic substances. Type B Projects are land use projects that will place new receptors in the vicinity of existing toxics sources. Examples of Type B Projects include residential, commercial, and institutional developments proposed to be located in the vicinity of existing toxic emission sources such as stationary sources, freeways or high traffic roads, rail yards, and warehouse distribution centers.

The proposed project would install a ground-mounted PV solar energy system and a BESS that would provide renewable energy for the CSUB campus. The proposed project would not include a source of air toxic emissions, nor would it locate residential, commercial, or institutional land uses in the vicinity of existing toxic emission sources; therefore, the proposed project does not meet the definition of a Type A or Type B project, per the GAMAQI. With regards to Valley Fever considerations, regular ground disturbance would not occur following the completion of construction activities, and the site conditions would remain similar to existing conditions with the exception of the mounting structures for the PV solar array. Therefore, the proposed project would result in less than significant impacts related to exposure of sensitive receptors to substantial pollutant concentrations.

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

Less than Significant Impact.

Construction

The only source of potentially impactful construction emissions other than criteria pollutants, O_3 precursors, and TACs would be emissions leading to odors. Potential sources that may produce objectionable odors during construction activities include equipment exhaust, welding, and application of sealants or coatings. Odors from these sources would be localized and generally confined to the immediate area surrounding the project site, would be temporary in nature, and would not persist beyond the termination of construction activities. The proposed project would utilize typical construction techniques, and the odors would be typical of most construction sites and temporary in nature. In addition, the odors associated with these emissions would dissipate as distance from the construction site increases. Construction of the proposed project would comply with the provisions of SJVAPCD Regulation VIII, Fugitive PM_{10} Prohibitions and Rule 4102–Nuisance to prevent the occurrence of visible dust plumes. Therefore, construction impacts related to the emissions of odors and other potential nuisance conditions would be less than significant.

Operation

According to the GAMAQI, facilities associated with odor complaints typically include wastewater treatment facilities, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing, fiberglass manufacturing, painting/coating operations, food processing facilities, feed lot/dairy, and rendering plants. The proposed project would not include any of these types of land uses. Therefore, no operational impact related to the emissions of odors or other potential nuisance conditions would occur.

3.4 Biological Resources

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

Potential impacts to biological resources associated with the proposed project are based on the information presented in the Biological Resources Technical Memorandum, which is included as Appendix B to this IS/MND.

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?

Less than Significant Impact with Mitigation Incorporated. The Biological Resources Assessment (Appendix B) prepared for the proposed project included a literature review, records searches, and a field survey conducted on February 12, 2026, of the biological study area, which is defined as the project site plus a 300-foot buffer surrounding the project site. Based on the Biological Resources Assessment, the project site consists primarily of non-native grassland and disturbed or developed land cover. A total of 31 special-status plant species were

identified during reviews of the California Natural Diversity Database (CNDDB), California Native Plant Society's Inventory of Rare and Endangered Plants of California, and U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Conservation online database. No special-status plant species were observed during the field survey. After a review of specific habitat preferences, known distributions, and elevation ranges, it was determined that no special-status plant species are expected to occur within the project site.

A total of 39 special-status wildlife species were identified during reviews of the CNDDB, and USFWS's Information for Planning and Conservation online database. No special-status wildlife species were observed during the field survey. After a review of results of the literature search and specific habitat preferences, known distributions, and elevation ranges, it was determined that four special-status wildlife species are expected or have moderate potential to occur on-site, including San Joaquin kit fox (SJKF), burrowing owl, Bakersfield legless lizard, and San Joaquin coachwhip.

SJKF is considered present within the CSUB campus. An earthen kit fox den was previously identified within the project site in 2017 but no longer exists as of February 2025~~by McCormick Biological Inc. in January 2026 and a CNNDB record indicates that~~. No sign of SJKF, the previously known den, or SJFK within 800 feet of the project site was identified in the February 2025 campus-wide survey conducted by McCormick Biological Inc. Another survey conducted in July 2026 confirmed no signs of SJKF or SJKF dens at the project site. However, based on CNNDB records, the species is known and expected on-site.

According to McCormick Biological Inc., no burrowing owls or known burrowing owl burrows have been observed at the project site or within a 200-foot buffer from 2024 to present.[12] Non-native grassland habitat suitable for burrowing owl and numerous ground squirrel burrows potentially suitable for burrowing owl were found on-site. However, on-site habitat quality for burrowing owl is limited within the project site when a cover of thick and tall non-native grasses is present, which was evident during the February field survey. Burrowing owl was recorded in 2004 less than one mile southwest of the project site. In addition, although no known burrowing owl burrows have been identified within the CSUB campus areas surveyed by McCormick Biological Inc., a burrowing owl individual was observed just northeast of the facilities yard in 2025. No burrowing owl individuals were observed after that single sighting and no evidence of occupied burrows were observed during the two subsequent surveys conducted in the immediate area within the two weeks following the individual sighting.[13] Thus, this species was determined to have moderate potential to occur within the project site.

Due to potentially suitable habitat within the project site and CNDDB records from the project vicinity, Bakersfield legless lizard and San Joaquin coachwhip were determined to have moderate potential to occur on-site.

Recent occurrence records for Crotch's bumble bee (*Bombus crotchii*), a State candidate for listing as endangered, were identified approximately 2.5 miles east of the project site. The non-native grassland on-site was determined not to be suitable habitat for this species. This habitat is dominated by grass species and appears to occasionally be maintained. In addition, no Crotch's bumble bee has been incidentally observed by McCormick during their surveys of the CSUB campus. While not expected, as the species are generalist foragers, Crotch's bumble

[12] E. Noel, Senior Biologist, McCormick Biological Inc., personal communication, March 17, 2026.
[13] Ibid.

bee may forage within the project site.

Nesting birds are protected pursuant to the Federal Migratory Bird Treaty Act (MBTA) of 1918 and California Fish and Game Code (CFGC). To maintain compliance with the MBTA and CFGC, clearance surveys are typically required during the breeding season (generally February 1 to August 31 but as early as January 1 for raptors) prior to any ground disturbance or vegetation removal activities to avoid direct and indirect impacts to active bird nests and/or nesting birds. Consequently, if an active bird nest is destroyed or if project activities result in indirect impacts to nesting birds (e.g., nest abandonment, loss of reproductive effort), it is considered "take" and is potentially punishable by fines and/or imprisonment. Although no nests were observed during the field survey, vegetation within and adjacent to the project site, in particular ornamental landscaped areas, provides suitable nesting opportunities for a variety of bird species.

The proposed project could result in a substantial adverse effect, either directly or through habitat modifications, on special-status wildlife species including burrowing owl, SJKF, Bakersfield legless lizard, ~~and~~ San Joaquin coachwhip, and Crotch's bumble bee. In addition, nesting activity typically occurs from February to August, which may overlap with construction activities. Disturbing or destroying active nests is a violation of the MBTA, and nests and eggs are protected under Section 3503 of the CFGC. The removal of vegetation during the breeding season is considered a potentially significant impact. Therefore, implementation of Mitigation Measures BIO-1 through ~~BIO-4~~BIO-5 would reduce potential impacts to special-status wildlife species to a less than significant level.

Mitigation Measures

BIO-1: **Nesting Birds:** Project activities, including but not limited to, staging, vegetation removal, gravel road installation, installation of solar components, including pile driving, shall occur outside of the avian breeding season which generally runs from February 1 – August 31 (as early as January 1 for some raptors) to avoid take of birds or their eggs. If avoidance of the avian breeding season is not feasible, qualified biologists with experience in conducting breeding bird surveys shall conduct two (2) nesting bird surveys within one week prior to the initiation of project activities to detect protected native birds occurring on-site and, as access to adjacent areas allows, other suitable habitats within 500 feet of the project site. The second survey shall be conducted no more than three days prior to the initiation of project activities. Further, nesting bird surveys shall be conducted within three (3) days prior to project activities occurring within a new area of the project site, based on the qualified biologist's evaluation of the need for further surveys as work shifts into a new area. If a lapse in project-related work of five days or longer occurs, another nesting bird survey shall occur prior to work resuming. The results of all nesting bird surveys shall be provided to CSUB.

If an active nest is located, project activities within 300 feet of the nest (within 500 feet for raptor nests), or as determined appropriate by a qualified biological monitor, must be postponed until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. The qualified biological monitor shall evaluate species-specific information; ambient conditions and the birds' habituation to them; and the terrain, vegetation, and birds' lines of sight between project activities and the nest and foraging areas should a nest buffer reduction be determined appropriate. Flagging, stakes, and/or construction fencing shall be used to demarcate the inside boundary of the buffer. CSUB, project personnel, including all contractors working on

site, shall be instructed on the sensitivity of the area.

BIO-2: Biological Monitoring: A qualified biological monitor shall be present on-site daily during site preparation activities involving ground disturbance and vegetation removal, gravel road installation, and installation of solar components, at the discretion of the biological monitor who will consider time of year, construction activity occurring, and observations of any special-status species to date.

The qualified biological monitor shall conduct ~~a~~ pre-activity clearance surveys of the project site every day that monitoring is determined to be required to confirm the status of any active nests, that no new nests are present, and that no anticipated special-status species are present, ~~and to flush or remove any special-status, or common reptile species that may be present,~~ including Bakersfield legless lizard and San Joaquin coachwhip. If any wildlife is found, the biological monitor shall flush or relocate the animal(s) to appropriate habitat offsite, or stop work in the vicinity of the species and allow individual species to leave on their own accord.

The biological monitor shall confirm that construction activities remain within the project footprint and outside any demarcated nest buffer, that the nest buffer flagging/stakes/fencing is in place, and that the likelihood of project activities causing any active nests to be abandoned or fail is minimized. During monitoring, the biologist shall also confirm that project avoidance and minimization measures are adequately protecting sensitive resources, or if additional measures are needed to provide protection from project impacts.

In the event the biological monitor determines additional protection measures are needed or an unanticipated special-status species is detected on-site, the biological monitor shall stop all work within an avoidance buffer determined appropriate to protect the resource and immediately inform CSUB and support further coordination with responsible agencies (California Department of Fish and Wildlife (CDFW) or USFWS), as appropriate. The biological monitor shall prepare a monitoring report for each day on-site and provide reports to CSUB on a weekly basis.

BIO-3: Burrowing Owl: A qualified biologist shall conduct four non-breeding season surveys inclusive of a preconstruction survey for burrowing owl 14 days prior to initiation of ground-disturbing activities. If the species is detected or a known burrowing owl den is detected, an avoidance buffer determined appropriate to protect the species or den shall be implemented. Furthermore, if~~If~~ the species is present and an avoidance buffer is not feasible, coordination with CDFW regarding the need for an Incidental Take Permit pursuant to CFGC Section 2080 et seq. will be required. Additional preconstruction surveys may be necessary within three days prior to construction to verify the species has not recolonized.

BIO-4: San Joaquin Kit Fox: CSUB is currently in the process of obtaining an Incidental Take Permit for impacts to SJKF. In the absence of an approved Incidental Take Permit for construction of the solar photovoltaic system on the project site, or in the event the project is not a covered activity under the Incidental Take Permit, prior~~Prior~~ to and throughout construction of the proposed project, the following mitigation and avoidance measures ~~outlined in the Incidental Take Permit~~ shall be adhered to:

- A qualified biologist shall survey the construction site for potential SJKF dens no less than 14 days and no more than 30 days prior to ground disturbance. The survey area shall include the entire construction site, including any access and laydown areas, plus a 100-foot buffer of the site or to the edge of the

project site boundaries, whichever comes first. The biologist shall produce a map of all potential SJKF dens in the survey area.

- If a potential SJKF den is found during the pre-construction den survey and cannot be avoided by a buffer distance determined in consultation with CDFW and USFWS~~at least 100 feet~~, the qualified biologist shall conduct den monitoring prior to ground disturbance. The biologist shall monitor the den for three (3) consecutive nights using tracking medium and/or infrared motion sensor cameras. If no kit fox activity is observed at the potential den during this period, CSUB shall consult with and obtain approvals from CDFW and USFWS regarding measures to~~the den may be excavated and blocked immediately to prevent use by~~ protect SJKF during construction-related activities.
- If SJKF activity is observed at a potential den during the monitoring period ~~and the den is determined to not be an active natal den~~, the qualified biologist shall monitor the den for five (5) consecutive nights using tracking medium and/or infrared motion sensor cameras from the time of the observation to allow any resident animal to move to another den during its normal activity. With coordination and approval from CDFW and USFWS, use~~Use~~ of the den ~~shall~~ may be prevented or discouraged during this period~~ using a method or methods identified by the qualified biologist, in coordination with CDFW and USFWS~~.
- ~~After the qualified biologist determines that a SJKF den is unoccupied following five (5) consecutive nights of monitoring, the den shall be excavated by or under the direction and supervision of the qualified biologist.~~ If a SJKF remains present at a den after five (5) or more consecutive nights of monitoring, ~~the qualified biologist shall determine whether excavating the den by hand when it is temporarily vacant (i.e., during the animal's normal foraging activities) is appropriate,~~ in coordination with and with approval from CDFW and USFWS, other methods may be identified to start construction in other areas of the project site, if deemed appropriate~~or identify other methods to collapse and plug the den. The location of excavated dens shall be recorded~~.
- ~~For SJKF dens within 100 feet of the construction site but outside the area of temporary or permanent impacts, after the qualified biologist determines that the SJKF den is unoccupied following five (5) consecutive nights of monitoring, the den may be temporary sealed (e.g., with sandbags) at the discretion of the qualified biologist to prevent kit foxes from using the den while demolition or construction is underway nearby. The biologist shall flag the den with caution tape for avoidance by construction personnel. The location of sealed dens shall be recorded. After construction, is complete, temporarily sealed dens shall be unsealed.~~
- ~~If a den is determined to be an active natal den during pre-construction den monitoring, a 100-foot buffer shall be established around the den where no work may occur until after the pupping season or after the qualified biologist has determined that SJKF have vacated the den through additional monitoring. The biologist shall flag these dens with caution tape for avoidance by construction personnel.~~
- Prior to ground disturbance, a qualified biologist shall prepare and conduct an employee education program for all construction personnel. The training shall include a brief review of the biology of SJKF, the measures that will be

implemented to protect the species during construction-related activities, guidelines to avoid impacts to the species, the penalties for non-compliance, and the boundaries of the construction site. A fact sheet or other supporting materials containing this information shall be prepared by the biologist and distributed to construction personnel. Educational programs will be conducted for any new personnel before they join construction activities. The crew foreman will be responsible for ensuring that all crew members comply with the guidelines.

- A qualified biologist shall monitor all initial ground disturbance to ensure SJKF protective measures are being implemented. Following initial ground disturbance and vegetation removal, the biologist shall train a member of the construction crew (typically the foreman) to act as the construction monitor. The determination of when the construction monitor is sufficiently trained to act independently shall be made by the biologist. The biologist shall inspect the project site at a frequency determined by the biologist during this phase of construction. Both the biologist and the construction monitor shall have the authority to stop work and/or redirect project activities to ensure protection of SJKF and compliance with all environmental permits and conditions of the project. The biologist or the construction monitor shall complete a daily log summarizing activities.
- If a SJKF moves into the construction site during project activities, the qualified biologist, CDFW, and USFWS shall immediately be contacted. If the qualified biologist determines that the fox is not a nuisance (e.g., it is not impeding work or posing a safety hazard to property operators or the foxes themselves), it will be left alone and not harassed. In the case of a trapped kit fox, escape ramps or structures shall be installed immediately to allow the animal to escape, or the biologist and CSUB shall contact USFWS and CDFW for guidance.
- Any contractor, employee, or other personnel who inadvertently injures or kills a SJKF shall immediately report the incident to construction monitor, the qualified biologist, or the University Police Department. CSUB shall immediately report the incident to USFWS and CDFW.
- The contractor shall implement the following best management practices during construction activities:
    - All pipes or openings with a diameter of three (3) inches or larger shall be inspected and then capped or covered.
    - All holes and trenches shall be inspected and covered at the end of each workday. If a trench cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed.
    - Screening (e.g., chain-link fence) shall be laid on the ground underneath elevated structures to reduce den digging.
    - No pallets shall be left on the ground that could allow SJKF to colonize the area.
    - All vehicles shall be inspected (under and around) for SJKF before they are moved.
    - Construction-related vehicle traffic shall be restricted to established roads and designated access, staging, and parking areas.

- Construction vehicle speeds shall not exceed ~~25~~20 miles per hour on paved roads and five miles per hour on dirt roads.
- Feeding of SJKF shall be prohibited.
- Pets shall be prohibited in construction sites.
- Firearms shall be prohibited.
- During project activities, all trash that may attract SJKF shall be properly contained, removed from the work site, and disposed of ~~regularly~~ at least once a week from the project site. Following construction, all trash and construction debris shall be removed from work areas.
- Work shall be prohibited after sunset and before sunrise, when kit foxes are most active.
- Use of rodenticides on the project site shall be prohibited and the use of herbicides shall be restricted. All uses of herbicides shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation, and be approved for use by the University.

BIO-5 Crotch's Bumble Bee: A qualified biologist shall conduct two preconstruction surveys, the first of which would include a habitat assessment, for nesting Crotch's bumble bee prior to initiation of ground-disturbing activities. A report documenting the results of the habitat assessment and surveys shall be submitted to CSUB for their records. If the species is detected, a 50-feet avoidance buffer of small mammal burrows shall be implemented until coordination with CDFW can occur. If avoidance is not feasible, coordination with CDFW regarding the need for an Incidental Take Permit pursuant to CFGC Section 2080 et seq. will be required.

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, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact. The project site is dominated by non-native grassland habitat. A small area in the southwest portion of the biological study area buffer contains Fremont cottonwood forest and woodland within the ESA (an official CSU research center established in 1975 used for teaching and research). The vegetation community is not associated with any aquatic features and appears to be planted for educational purposes. No impacts to this area are anticipated to occur. There are no riparian habitat or other sensitive natural communities present within the project site. Therefore, the proposed project would not have a substantial adverse effect on riparian habitats or other sensitive natural communities, and no impact would occur.

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?

No Impact. There are no drainage features within the project site. The only drainage feature in the immediate vicinity of the project site is the Arvin-Edison Canal, located to the east of the project site. The project site does not contain any state or federally protected wetlands. Therefore, the proposed project would not have a substantial adverse effect on state or federally protected wetlands, and no impact would occur.

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?

Less than Significant Impact with Mitigation Incorporated. The project site consists of an undeveloped area surrounded on all sides by existing development and disturbance associated with the CSUB campus, the Arvin-Edison Canal and a transmission right-of-way, and neighboring residential and commercial developments. The project site has no connectivity to any natural habitats that would serve as migration corridors. The adjacent Arvin-Edison Canal, a concrete channel, may serve as a corridor for localized wildlife adapted to an urban environment; however, the project is not anticipated to impact the channel. Thus, there would be no impact to native wildlife movement or wildlife corridors. Nevertheless, the proposed perimeter fence which would be approximately 7 feet high and 4,000 linear feet with multiple access gates, would be designed to allow small- to medium-sized wildlife to pass underneaththroughwith culverts.

As discussed in Section 3.4(a), although no nests were observed during the field survey, vegetation within and adjacent to the project site, in particular ornamental landscaped areas, provides suitable nesting opportunities for a variety of bird species. Nesting activity typically occurs from February to August. The removal of vegetation during the breeding season is considered a potentially significant impact. Implementation of Mitigation Measure BIO-1, described above, would reduce this impact to a less than significant level.

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

No Impact. The project site is currently undeveloped and dominated by non-native grassland but contains some trees south of the existing practice soccer field and within the ESA. CSUB has a Campus Tree Care Plan, which provide goals, guidance, and standardization regarding planting, selection, and maintenance of trees at the campus. The Campus Tree Care Plan states that all tree trimming and removal shall be performed in accordance with the American National Standards Institute (ANSI) A300 standards and that contractors will receive a copy of the Tree Care Plan's protection and preservation practices at the time of commencing a project. The project would conduct tree removal in accordance with the Campus Tree Care Plan, and thus, is not anticipated to conflict with any local policies or ordinances, such as a tree preservation policy or ordinance. Therefore, no impact would occur.

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?

No Impact. The project site is not located within any adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Notwithstanding, the University is in the process of preparing a habitat conservation plan for the campus as part of the Incidental Take Permit for the SJKF. Proposed measures to avoid and minimize impacts to the SJKF that are applicable to this project have been incorporated into Mitigation Measure BIO-4. Therefore, the proposed project would not conflict with habitat conservation or natural community conservation plans, and no impact would occur.

3.5 Cultural Resources

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

Potential impacts to cultural resources associated with the proposed project are based on the information presented in the Cultural and Paleontological Resources Identification Memorandum, which is included as Appendix C to this IS/MND.

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No Impact. A pedestrian survey conducted on February 13, 2026, for the Cultural and Paleontological Resources Identification Memorandum (Appendix C) identified a portion of the James Canal, an early irrigation canal constructed beginning in 1871 to serve agricultural land in the area. The James Canal was evaluated for the California Register of Historical Resources (California Register or CRHR) and was found to lack historical significance under all four criteria. As a result, the James Canal is recommended ineligible for the California Register and is not a historical resource, as defined by CEQA Section 15064.5(a). A records search of the CSUB main campus and a quarter-mile radius conducted at the Southern San Joaquin Valley Information Center (SSJVIC) did not identify any other built environment resources in the project area. Thus, there are no historical resources on the project site or in the immediate vicinity. Therefore, the project would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 and no impacts would occur.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than Significant Impact with Mitigation Incorporated. A records search was conducted on February 11, 2026, at the SSJVIC of the CSUB campus and a quarter-mile radius. According to the results of the records search, of the 15 studies that have taken place within the quarter-mile search radius, only one study took place on campus and none overlap the project site. The records search results revealed that less than one percent of the CSUB main campus has been subjected to previous formal archaeological study. The records search also identified seven resources located within the quarter-mile search radius, five of which are located on campus. Only two of the five resources located on campus are formally recorded and none overlap the project site. Details of studies and resources are available in the Cultural and Paleontological Resources Identification Memorandum, which is provided as Appendix C of this IS/MND.

The results of a record search of the Sacred Lands File provided by the Native American Heritage Commission (NAHC) on March 26, 2026, was also negative for resources.

The project site is located in the southern San Joaquin Valley, approximately 2.5 miles west of the Old Kern River, and slightly over 0.5 miles south of the current bed of the Kern River. The Kern River frequently shifted its bed through this area, which would have been occupied by knolls and marshes. Because of the area's rich resources, it might be expected to have been intensively used in precontact and early post contact times by Native American tribes such as the Yowlumne tribe of the Southern Valley Yokuts, who are documented to have occupied the village of Woilo in present-day Bakersfield. Soils maps and geologic maps indicate that Holocene alluvium overlies the entire project area. This alluvium, which can reach considerable depths, has the potential to bury archaeological resources. While there are no formally documented precontact resources on the CSUB campus or within the 0.25-mile buffer, this is most likely due to the lack of archaeological study of the region. There are "informal" resources on campus, some of which may be deposits associated with CSUB's past as an archaeological teaching campus, or which may be archaeological sites requiring additional study. However, the project site's history of human disturbance reduces its sensitivity at shallow depths.

The Bakersfield area was drained of its marshes beginning in the nineteenth century in order to prepare it for agriculture. An active canal and access road borders the project site to the east, and remnants of the James Canal cut across the south end of the project site. Historical maps show the CSUB campus covered by a network of canals, levees, and berms, most of which are no longer visible today. The earth-moving required to excavate the canals and build up the berms would have required substantial ground disturbance. Further, the project site was actively farmed at least into the 1970s, and part of the project site was later leveled and planted for the soccer field. These activities would have disturbed the project site to unknown depths near surface. The excavations and grading needed for reclamation and farming can reasonably be assumed to have destroyed any archaeological deposits that may have existed within the project site at shallow depths.

Based on the above, there is low potential that unknown archaeological resources would be encountered at shallow depths during ground-disturbing activities for the project due to past ground disturbance. However, deeper excavations may extend into undisturbed alluvial deposits. These deposits have a moderate potential to disturb intact significant archaeological sites. Therefore, Mitigation Measure CUL-1 would be required to ensure that impacts to archaeological resources would be less than significant.

Mitigation Measures

CUL-1: Qualified Archaeologist and Monitor: Prior to any ground-disturbance activities, CSUB shall retain a qualified professional archaeologist who meets the Secretary of the Interior's professional qualifications for archaeology. The qualified professional archaeologist shall oversee archaeological monitoring by a qualified archaeological monitor for ground disturbance within the project site, specifically during the site preparation activities deeper than approximately 12 inches, gravel road installation, and conduit installation phases. If, in the course of monitoring, the qualified professional archaeologist finds that excavations are within disturbed soil, or the sensitivity for buried resources is otherwise low, then archaeological monitoring may be reduced or suspended at the discretion of the qualified professional archaeologist with the approval of CSUB.

If any subsurface cultural resources are encountered during earth-moving activities, regardless of whether work is actively being monitored, all work shall be halted in the vicinity of the discovery until the qualified professional archaeologist can evaluate the find and make recommendations. The archaeologist shall evaluate the find in

accordance with federal, state, and local guidelines, including California Public Resources Code Section 21083.2, to assess the significance of the find and identify avoidance or treatment measures as appropriate. If the find is determined to be a tribal resource, the appropriate tribes would be notified. If the resource is determined to be potentially significant and cannot be avoided, then a plan of treatment shall be developed and implemented by the qualified archaeologist in consultation with interested tribes. The site shall not be released for work until treatment has been completed to the satisfaction of CSUB.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant Impact. Based on the history of the project site provided in the Cultural and Paleontological Resources Identification Memorandum, there is no evidence that the project site was utilized as a formal cemetery or burial site. However, the possibility of encountering human remains during project construction exists. California Health and Safety Code Section 7050.5, CEQA Guidelines Section 15064.5(e), and Public Resources Code Section 5097.98 mandate the process to be followed in the unlikely event of an accidental discovery of human remains in a location other than a dedicated cemetery. If human remains are discovered within a project site, construction must halt in the area of the discovery until the County coroner has conducted an investigation into the circumstances, manner, and cause of any death, and has provided recommendations concerning the treatment and disposition of the human remains to the person responsible for the excavation or to his or her authorized representative. If the coroner determines that the remains are of Native American descent, the NAHC must be notified within 24 hours. The NAHC would then identify the person(s) thought to be the most likely descendant of the deceased Native American, who would have 48 hours from notification by NAHC to inspect the site of the discovery of Native American remains and to recommend to the project applicant or landowner the means for the treatment and disposition of the human remains and any associated grave goods. Compliance with California Health and Safety Code Section 7050.5, CEQA Guidelines Section 15064.5(e), and Public Resources Code Section 5097.98 would ensure that impacts related to human remains would be less than significant.

3.6 Energy

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

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

Less than Significant Impact. Construction of the proposed project is anticipated to begin in October 2026 and would occur over an approximately eight-month period and be operational by December 2027. CSUB and its contractors selected to construct the proposed project would be required to comply with state, regional, and local regulations and policies applicable to off-road equipment and on-road vehicles, which include requirements that are relevant to energy resources. For example, the Airborne Toxic Control Measure (Title 13, CCR § 2485) requires that diesel-fueled commercial motor vehicles with gross vehicle ratings greater than 10,000 pounds that are licensed to operate on highways do not idle for more than five minutes at any location. The In-Use Off-Road Diesel-Fueled Fleets [Title 13, CCR § 2449(d)(2) requires that all self-propelled off-road diesel vehicles 25 horsepower or greater must limit idling to five minutes.

Construction of the proposed project would involve off-road construction equipment use, on-road heavy-duty truck trips to deliver materials to the site, and on-road vehicle trips associated with construction crew trips to and from the construction site. Operation of these off-road equipment and on-road vehicles would consume petroleum-based fossil fuels (i.e., diesel and motor gasoline). Equipment required to construct the proposed project would include a rubber tired dozer, grader, roller, rubber tired loader, crane, bore/drill rig, forklift and rough terrain forklift, tractor/loader/backhoe, air compressor, and trencher. In 2024, approximately 207 million gallons of gasoline was sold in the City of Bakersfield;[14] due to the temporary nature of construction for the proposed project would represent a nominal percentage of fuel consumption. This temporary fuel consumption would not strain existing refined petroleum fuels availability. Through maintaining construction equipment in optimal operating conditions and limiting equipment idling in accordance with state regulations, construction of the proposed project would minimize its expenditure of non-renewable energy resources. Additionally, it is not anticipated any natural gas would be required for construction and any electricity use for electric powered tools would be nominal and may be powered by a generator. Therefore, construction impacts would be less than significant.

During operation, the proposed project would generate onsite renewable energy for CSUB and would support State and CSU systemwide goals to reduce reliance on carbon-emitting energy

[14] California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, Gasoline Sales by Cities 2024, available at: https://www.energy.ca.gov/media/5869/.

sources. The proposed project is estimated to generate approximately 8.3 GWh, or approximately 40 percent of the campus's electricity use of clean, renewable energy annually. Therefore, the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during operation, and impacts would be less than significant.

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

No Impact. The CSU Sustainability Policy applies sustainable principles across all areas of university operations and seeks to integrate sustainability into all facets of the CSU, including academics, facilities operations, the built environment, and student life. The CSU Sustainability Policy was most recently revised in 2024. The CSU Sustainability Policy includes policies applicable to energy reliance and procurement, which states that the CSU will pursue energy procurement and production to reduce energy capacity requirements from fossil fuels, enhance electrical demand flexibility, and promote energy resilience using available economically feasible technology for on-site renewable generation, microgrids, and other fossil fuel-free energy storage solutions. Under the CSU Sustainability Policy, the CSU is striving to increase its self-generated renewable energy and battery capacity from 32 to 80 MW by 2030. Additionally, the CSU will consider cost effective opportunities to exceed the State of California and California Public Utilities Commission Renewable Portfolio Standard (RPS) sooner than the established goal of procuring 60 percent of its electricity needs from renewable sources by 2030 consistent with SB 100. As a solar energy facility project, the proposed project supports the CSU Sustainability Policy's goals of increasing its self-generated renewable energy and battery capacity. Additionally, the University is in the process of developing a strategic energy plan, with a goal of increasing use of renewable energy sources, making use of energy efficiency improvements to campus, and implementing advanced energy innovations in future campus construction. Therefore, the proposed project is consistent with state and local plans for renewable energy and energy efficiency, and no impact would occur.

3.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact 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:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv. Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. The Alquist-Priolo Earthquake Fault Zoning Act was established in California to mitigate earthquake hazards and includes regulatory zones around known active faults for the purposes of preventing new construction in these areas. According to the California Geological Survey, the CSUB campus is not mapped within an Alquist Priolo Earthquake Fault Zone and

no known faults cross the project site.[15] The closest fault to the CSUB campus is the Kern Front Fault, located approximately 8 miles northwest.[16] The proposed project would be designed and constructed in compliance with the latest version of the CBC and other applicable local, state, and federal codes to minimize impacts related to fault rupture. Specifically, the CBC, codified as Title 24, Part 2 of the CCR, is a comprehensive set of standards that regulates the design, construction, and materials, of all buildings, structures, and certain types of equipment throughout the state. Furthermore, there would be no occupied facilities related to the project. Additionally, a site-specific geotechnical assessment for the proposed project was completed and provides design recommendations related to seismic criteria. As such, the proposed project would not directly or indirectly cause substantial adverse effects involving rupture of a known earthquake fault, and no impact would occur.

ii. Strong seismic ground shaking?

Less than Significant Impact. As with most of California, the CSUB campus is located in a seismically active region and may be subject to strong seismic ground shaking. During a seismic event, the project site could experience high levels of ground shaking which could result in damage to the solar energy system. The proposed project would be required to comply with the CBC in effect at the time on project construction. In addition, construction of the solar energy system would adhere to the CSU Seismic Requirements, which were established to implement the CSU Seismic Policy approved by the BOT that applies to all structures within the bounds of a CSU physical master plan.[17] A site-specific geotechnical assessment for the proposed project was completed and provides design recommendations related to seismic criteria. Compliance with the CBC and the CSU Seismic Requirements, and implementation of the design recommendations from the geotechnical assessment, would minimize risks pertaining to seismic ground shaking. Moreover, the proposed project would not construct any habitable structures on the project site, and the proposed solar energy system would be automated and unstaffed during operation. As such, the project would not directly or indirectly cause substantial adverse effects involving strong seismic ground shaking, and impacts would be less than significant.

iii. Seismic-related ground failure, including liquefaction?

No Impact. Liquefaction occurs when loose, water-saturated soils lose their strength and stiffness during strong ground shaking, particularly in areas with high groundwater. According to the geotechnical investigation for the project site, the potential for liquefaction and related settlement is low. Additionally, investigative borings did not encounter groundwater in test borings ranging from approximately 20 to 50 feet below existing site grade; thus, the construction for the proposed project is not expected to encounter groundwater. The proposed project would not construct any habitable structures on the project site, and the proposed solar energy system would be automated and unstaffed. All components of the proposed project would be designed and constructed in accordance with CBC and the CSU Seismic Requirements, which would minimize risks pertaining to seismic-related ground failure, including liquefaction. Therefore, the proposed project would not directly or indirectly cause substantial

[15] California Department of Conservation, California Geological Survey, California Earthquake Hazards Zone Application [Map], available at: https://conservation.ca.gov/cgs/geohazards/eq-zapp, accessed March 18, 2026.
[16] U.S. Geological Survey and California Geological Survey, Quaternary Fault and Fold Database for the United States, available at: https://www.usgs.gov/programs/earthquake-hazards/faults, accessed March 18, 2026.
[17] California State University, Office of the Chancellor, 2025, CSU Seismic Requirements, available at: https://www.calstate.edu/csu-system/doing-business-with-the-csu/capital-planning-design-construction/Documents/CSU_Seismic_Requirements.pdf.

adverse effects related to liquefaction, and no impact would occur.

iv. Landslides?

No Impact. A landslide is the downhill movement of rock, soil, or debris driven by gravity, which can be triggered by various factors such as rainfall or seismic events. The project site is relatively flat and does not contain slopes that would be susceptible to landslides. Therefore, the proposed project would not directly or indirectly cause substantial adverse effects involving landslides, and no impact would occur.

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

Less than Significant Impact. The project site is primarily undeveloped and unpaved, except for a soccer field and dirt access roads. Site preparation activities during project construction would include demolition of the soccer practice field fence, removal and/or capping of existing irrigation lines, installation of the perimeter fence posts and fencing, installation of the gravel access road, and minimal grading and compaction to accommodate the placement of the solar PV arrays and equipment pads. Such activities would disturb and expose soils on the project site to water and wind, potentially resulting in soil erosion. Since the project site exceeds one acre, the proposed project would be required to obtain a National Pollutant Discharge Elimination System (NPDES) Construction General Permit from the State Water Resources Control Board (SWRCB), which would require the project to develop a SWPPP that includes temporary erosion and dust control BMPs. In addition, project construction activities would be required to comply with SJVAPCD Rule 8021 to limit fugitive dust emissions during earthmoving activities, which would reduce the potential for wind erosion. With adherence to applicable regulations, project construction would not result in substantial soil erosion or the loss of topsoil and impacts would be less than significant.

Post-construction, the project site would remain predominantly pervious, with the exception of the areas for the equipment pads, including the pad for the BESS, and posts. The increase in impervious surfaces from implementation of the proposed project would be considered nominal compared to the whole of the campus and the erosion potential of the project site would remain low, similar to existing conditions. Therefore, project operation would not result in substantial soil erosion or loss of topsoil, and impacts would be less than significant.

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 off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact. The project site is relatively flat, and thus, would not be subject to landslide. Lateral spreading usually occurs on very gentle slopes or flat terrain and is caused by liquefaction. As discussed above in Section 3.9(a), the potential for liquefaction and related settlement at the project site is low. Subsidence is a gradual settling or sudden sinking of the ground surface due to subsurface movement of materials. It generally occurs due to the rapid and intensive withdrawal of subterranean fluids such as groundwater or oil. Subsidence is widespread throughout the City due to the extraction of water for irrigation since the late 1880s with the greatest displacement occurring in the southwestern portion of the City.[18,19] As discussed, investigative borings did not encounter groundwater in test borings ranging from approximately

[18] City of Bakersfield, 2016, Metropolitan Bakersfield General Plan, Chapter VIII – Safety/Public Safety, page VIII-8.
[19] Rincon Consultants, Inc., 2022, Bakersfield General Plan – Existing Conditions Background Report, Chapter 12, Natural & Manmade Hazards, page 148.

20 to 50 feet below existing site grade; thus, the construction for the proposed project is not expected to encounter groundwater nor would the project require groundwater extraction during operation. Therefore, the project would not be located on an unstable geologic unit that could result in landslide, lateral spreading, subsidence, liquefaction, or collapse, and no impact would occur.

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?

Less than Significant Impact. Expansive soils contain significant amounts of clay particles that swell considerably when wet and shrink when dry, which can cause damage to buildings, roads, and structures. Soils within the project site are comprised of Kimberlina fine sandy loam and Wasco sandy loam, which have low shrink-swell (expansion) potential.[20] Additionally, the geotechnical investigation for the Modular Pantry and Office Building on campus, approximately 950 feet west of the project site, notes that soils underlying the site had very low expansion potential. Thus, the likelihood of the project being located on expansive soil is low. In addition, the proposed project would be designed and constructed in accordance with the CBC and the CSU Seismic Requirements, and recommendations from the site-specific geotechnical assessment. Therefore, the proposed project would not create substantial direct or indirect risks to life or property related to expansive soils, and impacts would be less than significant.

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?

No Impact. The proposed project is a solar energy system that would be automated and unstaffed. The project would not include on-site restroom facilities, and no wastewater would be generated during project operation. Therefore, the use of septic tanks or alternative wastewater disposal systems would not be required, and no impact would occur.

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

Less than Significant Impact with Mitigation Incorporated. As discussed in detail in the Cultural and Paleontological Resources Identification Memorandum (Appendix C) prepared for the proposed project, the underlying geology of the project area is comprised of alluvial fan deposits from the Late Holocene (4,200 years ago to present). Although Late Holocene-aged sediments are generally too young to produce fossils, there is potential for the underlying sediments to be old enough to contain fossils if these sediments are 5,000 years or older. Thus, the alluvial fan deposits are considered to have low potential for paleontological sensitivity at the surface, and a moderate sensitivity at depth to disturb paleontological resources within undisturbed bedrock or subsurface geologic deposits in previously undisturbed areas. The depth of this transition may be as shallow as 5 feet when comparing sedimentary deposition rates with similar Southern California and Central Valley units and known fossil localities.

In addition, a records search conducted at the Natural History Museum of Los Angeles County showed no previously identified fossil localities within the CSUB campus or the project site.

[20] U.S. Department of Agriculture, Natural Resources Conservation Service, Soil Survey Geographic (SSURGO) database for Kern County, California, Northwestern Part, available at: https://websoilsurvey.sc.egov.usda.gov/app/WebSoilSurvey.aspx, accessed March 18, 2026.

However, three fossil localities from similar Pleistocene deposits to those found within the project site were identified approximately 40 miles east and 65 miles west of the project site. These distant localities are from units that are Pleistocene in age, and although the underlying units at the project site are listed as Holocene in age, it is possible that Pleistocene-aged sediments similar to those at the identified localities may be impacted at depth within the project site.

Supplemental paleontological records searches within 10 miles of the CSUB campus were also conducted using the University of California Museum of Paleontology (UCMP) Locality Search website and the Paleobiology Database (PBDB). The UCMP Locality Search website found one locality within Kern County from Pleistocene sediments. The PBDB listed one locality within Pleistocene-aged sediments approximately 2 miles south of the CSUB campus. No other localities were listed from Pleistocene or Holocene aged sediments within 10 miles of the project area.

The proposed project would develop a solar energy system on the project site. Based on the underlying geology of the project site, the results of the records searches, and the anticipated ground-disturbing activities, the likelihood of the proposed project to directly or indirectly destroy a paleontological resource is low. Thus, the project's impact on paleontological resources is considered low but not negligible as inadvertent discoveries could occur. Therefore, the proposed project would implement Mitigation Measure GEO-1 to ensure potential impacts related to inadvertent discoveries would be less than significant.

Mitigation Measures

GEO-1: Inadvertent Paleontological Discoveries: Should any paleontological resources be discovered during construction or the course of any ground-disturbance activities, all such activities within 100 feet of the find shall be halted immediately and the construction site supervisor shall notify CSUB. At this time, CSUB shall retain and consult with a Society of Vertebrate Paleontology (SVP)-qualified paleontologist. The SVP-Qualified Paleontologist shall assess the significance of the find in accordance with SVP (2025) standards. If any find is determined to be significant, appropriate avoidance measures shall be followed at the discretion of the SVP-qualified paleontologist in coordination with CSUB, unless avoidance is determined to be unnecessary or infeasible by CSUB. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, paleontological monitoring for other project activities) shall be instituted.

3.8 Greenhouse Gas Emissions

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

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact. Greenhouse gas (GHG) emissions refer to a group of emissions that are generally believed to affect global climate conditions. The greenhouse effect compares the Earth and the atmosphere surrounding it to a greenhouse with glass panes. The glass panes in a greenhouse let heat from sunlight in and reduce the amount of heat that escapes. GHGs, such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), keep the average surface temperature of the Earth close to 60 degrees Fahrenheit (°F). Without the natural greenhouse effect, the Earth's surface would be about 61°F cooler. In addition to CO_2, CH_4, and N_2O, GHGs include hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, black carbon, and water vapor.

CO_2 is the most abundant pollutant that contributes to climate change through fossil fuel combustion. The other GHGs are less abundant but have higher global warming potential than CO_2. To account for this higher potential, emissions of other GHGs are frequently expressed in the equivalent of CO_2, denoted as CO_2e. CO_2e is a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential (GWP) of a GHG, is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Table 3.8-1 shows the atmospheric lifetimes and GWP of the most environmentally prominent GHGs.

Table 3.8-1: Atmospheric Properties of Regulated Greenhouse Gases

Pollutant	Lifetime (Years)	Global Warming Potential (20-Year)	Global Warming Potential (100-Year)*
Carbon Dioxide (CO_2)	--	1	1
Methane (CH_4)	12	21	25
Nitrous Oxide (N_2O)	114	310	298
Nitrogen Trifluoride	740	Unknown	17,200
Sulfur Hexafluoride	3,200	23,900	22,800
Perfluorocarbons	2,600-50,000	6,500-9,200	7,390-12,200
Hydrofluorocarbons	1-270	140-11,700	124-14,800

***** The GHG emissions analysis utilizes GWP values for CO_2, CH_4, and N_2O from the Intergovernmental Panel on Climate Change's Fourth Assessment Report consistent with the statewide GHG emissions inventory reporting protocol.
Source: CARB, 2014, First Update to the Climate Change Scoping Plan; CAPCOA, April 2022, California Emissions Estimator Model (CalEEMod) Version 2022.1 User Guide.

Summary of Applicable GHG Regulations/Standards

In 2006, the California State Legislature adopted Assembly Bill (AB) 32 (codified in Health and Safety Code Division 25.5—California Global Warming Solutions Act of 2006), which focused on reducing GHG emissions in California to 1990 levels by 2020. Health and Safety Code Division 25.5 defines GHGs as CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride and represents the first enforceable statewide program to limit emissions of these GHGs from all major industries with penalties for noncompliance. The law further requires that reduction measures be technologically feasible and cost effective. Under Health and Safety Code Division 25.5, CARB has the primary responsibility for reducing GHG emissions. Subsequent legislation has included Senate Bill (SB) 32, which expanded upon AB 32 to reduce GHG emissions to 40 percent below the 1990 levels by 2030; AB 197 which increased CARB's legislative oversight by adding two legislatively appointed nonvoting members to the CARB Board and provided additional protection to disadvantaged communities; SB 350, which increased California's renewable energy electricity procurement goal; and SB 100, which established a landmark policy requiring renewable energy and zero-carbon resources to supply 100 percent of electrical retail sales to end use customers and 100 percent of electricity procured to serve state agencies by 2045.

In May 2014, the BOT adopted the first systemwide Sustainability Policy. This policy, reflecting years of discussion and development, applies sustainable principles across all areas of university operations, expanding beyond facilities operations and utility management. This expansion was both a reaction to and a catalyst for the changing sustainability landscape within the CSU and higher education in general. The CSU Sustainability Policy seeks to integrate sustainability into all facets of the CSU, including academics, facilities operations, the built environment, and student life. The CSU Sustainability Policy was most recently revised in 2024.

The CSU Sustainability Policy includes a climate action plan (CAP) and policies applicable to energy reliance and procurement. The CAP states that the CSU will strive to reduce systemwide facility carbon emissions to 40 percent below 1990 levels by 2030 consistent with SB 32—an extension of California's Global Warming Solutions Act of 2006 (AB 32)—and reduce facility

carbon emissions to 80 percent below 1990 levels by 2040, with the ultimate objective of achieving carbon neutrality by 2045 in accordance with statewide mandates. The energy reliance and procurement policy states that the CSU will pursue energy procurement and production to reduce energy capacity requirements from fossil fuels, enhance electrical demand flexibility, and promote energy resilience using available economically feasible technology for on-site renewable generation, microgrids, and other fossil fuel-free energy storage solutions. Under the Sustainability Policy, the CSU is striving to increase its self-generated renewable energy and battery capacity from 32 to 80 MW by 2030. Additionally, the CSU will consider cost effective opportunities to exceed the State of California and California Public Utilities Commission RPS sooner than the established goal of procuring 60 percent of its electricity needs from renewable sources by 2030 consistent with SB 100.

The 2019 CSU CEQA Handbook states that if the project is located on a campus with a CAP that qualifies for CEQA tiering and streamlining, pursuant to CEQA Guidelines Section 15183.5, then the CAP should be used to evaluate the project's GHG emissions impact. CSUB does not currently have a CAP that qualifies for CEQA tiering and streamlining, and the 2019 CSU CEQA Handbook has not established significance thresholds for GHG emissions. Similarly, neither the state, the SJVAPCD, nor the City has adopted any numeric threshold for GHG emissions. CEQA Guidelines Section 15064.4 gives lead agencies the discretion to establish significance thresholds for their respective jurisdictions and, pursuant to CEQA Guidelines Section 15064.7, may appropriately look to thresholds developed by other public agencies, or suggested by other experts, such as the California Air Pollution Control Officer's Association, as long as any threshold chosen is supported by substantial evidence.[21] CEQA Guidelines Section 15064.4 gives lead agencies the discretion to determine whether to assess a project's emissions quantitatively or qualitatively.

The proposed project GHG emissions are quantified for informational purposes only, and the quantified GHG emissions are not evaluated against any numeric threshold to determine their significance. Instead, consistent with CEQA Guidelines Section 15064.4(b), significance of the GHG emissions is determined by assessing whether the proposed project complies with applicable CSU plans, policies, regulations, and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Construction

The primary sources of GHG emissions involved in construction activities include off-road equipment, on-site trucks, and on-road vehicle trips to and from the project site. Construction of the proposed project is anticipated to occur over an approximately eight-month period between October 2026 and December 2027. Estimates of GHG emissions that would be generated during construction of the proposed project were quantified using the California Emissions Estimator Model (CalEEMod, Version 2022.1). CalEEMod is based on outputs from Off-Road Emissions Inventory Program model (OFFROAD) and EMission FACtor model (EMFAC), which are emissions estimation models developed by CARB, and used to calculate emissions from construction activities, including off- and on-road vehicles, respectively. Table 3.8-2 presents a summary of the GHG emissions that would be released to the atmosphere through equipment and vehicle exhaust. As shown below, construction activities for the proposed project would produce a total of approximately 179.5 metric tons of CO_2e ($MTCO_2e$), and would cease upon completion of the installation.

[21] California Governor's Office of Land Use and Climate Innovation, 2026, *2026 CEQA Statute & Guidelines*.

Table 3.8-2: Proposed Project Greenhouse Gas Emissions

Phase/Emissions Source	Greenhouse Gas Emissions ($MTCO_2e$/year)
CONSTRUCTION	
Off-Road Equipment	158.6
On-Site Water Truck Activity	0.2
On-Road Gravel Hauling Truck Trips	2.6
On-Road Component Delivery Trips	9.8
On-Road Construction Crew Trips	8.3
Construction Total	179.5
OPERATIONS	
On-Site Solar Generation (Energy-Related Emissions Offset)	-775.6

Source: TAHA, 2026.

Operation

Operation of the proposed project following the completion of construction would not introduce any new permanent sources of GHG emissions to the project area. Operation of the proposed project would be automated and unstaffed. Maintenance of the proposed project would be infrequent and would not have the potential to substantially increase the truck or automobile trips that could generate GHG emissions. It is not anticipated that any new personnel would be required to operate the proposed project.

The proposed project would generate onsite renewable energy for the CSUB campus and would support the CSU goals to reduce reliance on carbon-emitting energy sources. The energy produced from the proposed project would provide an estimated annual production of 8.3 GWh of electricity, or approximately 40 percent of the campus' demand. The CSUB campus is within the utility service zone of PG&E, which is assigned a default GHG emissions intensity for provided electricity of 206 pounds of CO_2e emitted per MW-hour (lb.-CO_2e/MWh). Using this carbon intensity factor, future operation of the proposed project would offset approximately 775.6 $MTCO_2e$ of GHG emissions annually compared to using electricity provided by PG&E. Thus, the proposed project would offset a greater amount of GHG emissions during its first year of operation than the total amount of GHG emissions generated during its construction, and operations would result in a net environmental benefit to the CSUB campus. The proposed project would be directly aligned with the CSU Sustainability Policies to reduce carbon emissions and to increase production of on-site renewable energy. Therefore, implementation of the proposed project would result in a less than significant impact related to the magnitude of generated GHG emissions.

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

No Impact. As described above, a series of policies and plans have been promulgated by the CSU with the objective of reducing GHG emissions, with one priority being the supplement of grid-delivered electricity with on-site renewable energy. The following analysis describes the extent to which the proposed project complies with or does not conflict with adopted plans and policies to reduce GHG emissions. The CSU Sustainability Policy includes goals to reduce carbon emissions to 40 percent below 1990 levels, reduce carbon emissions to 80 percent below 1990 levels by 2040, achieve carbon neutrality by 2045, reduce reliance of fossil fuels,

increase on-site renewable energy production, increase battery capacity from 32 to 80 megawatts by 2030, and exceed the RPS established goal of procuring 60 percent of its electricity needs from renewable sources by 2030.

Regarding statewide regulations involving GHG emissions and reduction targets, the provisions of AB 32 required CARB to develop an initial Climate Change Scoping Plan containing strategies to achieve the 2020 emissions cap in 2008. Subsequently, CARB released updates to the Climate Change Scoping Plan in 2014, 2017, and 2022, with the latest iteration addressing the objective of carbon neutrality by 2045. The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32, SB 32, and related Executive Orders, and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. A project is considered consistent with the statutes and Executive Orders if it meets the general policies in reducing GHG emissions to facilitate the achievement of the state's goals and does not impede attainment of those goals.

Implementation of the proposed project would not conflict with regulatory initiatives to reduce GHG emissions across the various emissions source categories, including, but not limited to: the Advanced Clean Cars program, the low carbon fuel standard, vehicle efficiency measures, transportation electrification, reducing on-road vehicle miles traveled, and energy efficiency and renewable energy targets for electric utility providers. The proposed project would include the installation of a PV solar energy system and a BESS on the CSUB campus, which would align with statewide objectives to reduce reliance on energy derived from fossil fuels and increase the availability of renewable energy resources. The proposed project would expand the on-site renewable energy production on the CSUB campus, which would decrease demand on the PG&E system. The energy produced by the proposed project would provide a reduction in carbon emissions by reducing CSUB's reliance on carbon-emitting energy sources. Additionally, the proposed project would expand CSUB's battery capacity. Implementation of the proposed project would support the GHG reduction strategies outlined in the CSU Sustainability Policy. Therefore, the proposed project would result in no impact related to conflict with an applicable GHG reduction plan, policy or regulation.

3.9 Hazards and Hazardous Materials

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

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact. Construction activities would involve site preparation, pile driving and assembly of racking and modules, and electrical wiring, as described in Section 1.9, Project Construction. Hazardous materials typical of such construction activities would include but not be limited to fuel and oils associated with construction equipment, herbicides, solvents, lubricants, and sealants. All potentially hazardous materials used during project construction would be temporary and used and disposed of in accordance with manufacturers' specifications and instructions, thereby reducing the risk of hazardous materials use. In addition, the proposed project would comply with all applicable federal, state, and local requirements concerning the use, storage, and management of hazardous materials, including but not limited to the Resource Conservation and Recovery Act, California Hazardous Waste Control Law, federal and state Occupational Safety and Health Acts, SJVAPCD rules, and permits and associated conditions issued by the City of Bakersfield and the Bakersfield City Fire Department (the local

Certified Unified Program Agency[22]). In accordance with the Resource Conservation and Recovery Act, CSUB tracks chemicals from the time they are purchased and stored on the campus to the time they leave the campus and are transported for disposal.[23] Furthermore, the proposed project would be subject to CSUB's Hazardous Materials Management Plan (HMMP), which the University filed with the City of Bakersfield Fire Department's Prevention Services Division.[24] The HMMP addresses hazardous materials handling, storage requirements, labeling, spill prevention, leak detection, monitoring, awareness and response training, and actions in the event of an accidental release. The HMMP is updated annually for approval by the City of Bakersfield Fire Department, which routinely conducts inspections at facilities such as CSUB under the unified program to ensure compliance with hazardous materials requirements. CSUB also routinely inspects its hazardous materials storage areas and implements appropriate corrective actions in order to prevent or minimize accidental releases of hazardous materials. In the event of a hazardous materials incident, CSUB has trained personnel and contractors to handle such incidents. Such existing regulations and protocols require the proper management of the use of hazardous materials, which would prevent accidents, reduce exposure to specific chemicals, and ensure proper storage and disposal. Accordingly, construction activities would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and impacts would be less than significant.

During operation of the proposed project, the solar energy storage system would be automated and remotely monitored with onsite visits limited to periodic inspections and maintenance. Vegetation would be managed and maintained with the use of equipment and materials that are standard for landscaping uses, and small amounts of commercially available hazardous materials may be used for regular cleaning and maintenance activities. Such activities would not require the storage, use, or disposal of substantial amounts of hazardous materials or generate significant quantities of hazardous waste. Notwithstanding, as previously described, the proposed project would be required to comply with the HMMP to address hazardous materials handling, storage requirements, labeling, spill prevention, and training. Therefore, operations would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and impacts would be less than significant.

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?

Less than Significant Impact. The project site does not contain any structures, and thus, construction would not involve the demolition of structures that may contain lead-based paint or asbestos-containing materials. As such, the proposed project would not expose the public or environment to hazards resulting from the release of lead-based paint or asbestos-containing materials.

[22] California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program (Unified Program) as described in Chapter 6.11 of the California Health and Safety Code. The Unified Program is implemented at the local level by certified government agencies. The local Certified Unified Program Agency (CUPA) is required to consolidate, coordinate, and make consistent the administrative requirements, permits, fee structures, and inspection and enforcement activities within its jurisdiction. Most CUPAs have been established as a function of a local environmental health or fire department.

[23] California State University, Bakersfield, Hazardous Materials Management, available at: https://www.csub.edu/safety-risk-management/hazardous-materials-management.shtml.

[24] California State University, Bakersfield, 2007, Draft Environmental Impact Report, Campus Master Plan Update, State Clearinghouse No. 2006111133.

As detailed above in Section 3.9(a), the proposed project would involve the use of limited hazardous materials during construction and operation but would store, use, and dispose of such materials in accordance with applicable local, state, and federal regulations and requirements. The proposed project would be subject to CSUB's HMMP, which addresses hazardous materials handling, storage requirements, spill prevention, leak detection, monitoring, awareness and response training, as well as actions in the event of an accidental release. CSUB also inspects their hazardous materials storage areas routinely and implements appropriate corrective actions in order to prevent or minimize accidental releases of hazardous materials. In the event of a hazardous materials incident, CSUB has trained personnel and contractors to handle such incidents.

The proposed project would require the operation of a BESS. The BESS would come in a prefabricated enclosure unit, which would contain the lithium-ion batteries, and have a fire rating in compliance with industry standards. The solar energy system, including the BESS, would be controlled, monitored, managed, and analyzed remotely using the SCADA system. An existing off-site campus operations center would continuously monitor the condition of the system, including the BESS. The operations center would dispatch maintenance staff to the site on an as-needed basis. In the event of a system alarm or identified system health issue, the system, which is equipped with automated safety-shutdown features, would shut down automatically.

Therefore, through adherence to regulatory requirements, the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of such materials, and impacts would be less than significant.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact. The project site is located on the CSUB campus, and no other schools are located within a quarter mile of the project site. As discussed above, the proposed project would comply with existing federal, state, and local regulations related to the transport, use, and disposal of hazardous materials during construction. Moreover, no acutely hazardous materials would be required during construction, and construction activities would not emit hazardous emissions. Operation of the proposed project would involve the routine use and transport of a limited amount of hazardous materials for landscaping, cleaning, and maintenance, which are not considered acutely hazardous. Moreover, operation of the proposed project would not include any components that would generate hazardous emissions. Therefore, impacts related to the emissions or handling of hazardous materials in the vicinity of schools would be less than significant.

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

No Impact. The project site is not included on the SWRCB GeoTracker database, the California Department of Toxic Substance Control EnviroStor database, and lists of release/waste disposal sites as provided by the California Environmental Protection Agency a hazardous

materials site.[25,26,27,28] Therefore, the proposed project would not create a significant hazard to the public or the environment, and no impact would occur.

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?

No Impact. The project site is not located within an airport land use plan or within two miles of an airport. The airports nearest to the project site include the Bakersfield Municipal Airport, approximately five miles to the southeast, and the Meadows Field Airport, approximately six miles to the northeast.[29] Therefore, the proposed project would not result in safety hazards or excessive noise for people working or residing within an airport land use plan or within two miles of an airport, and no impacts would occur.

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

No Impact. CSUB's Emergency Operations Plan addresses the institution's planned responses to emergencies associated with natural disasters, technological incidents, human-caused incidents, and national security emergencies.[30] CSUB has its own police and facilities management departments but also coordinates all response operations with local entities for additional resources and support. The project site is accessible from surrounding roads such as Stockdale Highway and Gosford Road and major corridors such as Interstate 58 and State Route 99. Construction activities would occur entirely within the CSUB campus, with construction vehicle access provided via Kroll Way. Construction would not require any road closures; nonetheless, the University Police Department would be notified of construction activities. Emergency access to the project site and campus would be maintained at all times, and construction is not expected to interfere with emergency access to or through the project site. Once operational, access conditions would remain unchanged, and the project would not alter existing circulation patterns. Thus, emergency access to the project site would not change. Therefore, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and no impact would occur.

[25] California State Water Resources Control Board, GeoTracker, available at: https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Search+GeoTracker#, accessed March 11, 2026.
[26] California Department of Toxic Substances Control, EnviroStor, available at: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=csu+bakersfield, accessed March 5, 2026.
[27] California Environmental Protection Agency, Sites Identified with Waste Constituents Above Hazardous Waste Levels Outside the Waste Management Unit, available at: https://calepa.ca.gov/wp-content/uploads/2026/02/CorteseList-Solid-Waste-Facilities_2026.pdf, accessed March 5, 2026.
[28] California Environmental Protection Agency, 2026 Cortese List – Site Cleanup Program, available at: https://calepa.ca.gov/wp-content/uploads/2026/03/2026_scp_cortese.list_lat.long_.pdf, accessed March 5, 2026.
[29] Kern County, GIS, Airport Land Use Plan, Airport SOI [Map], available at: https://maps.kerncounty.com/H5/index.html?viewer=KCPublic, accessed March 3, 2026.
[30] California State University, Bakersfield, 2017, Emergency Operations Plan, available at: https://www.csub.edu/police/emergency/preparedness/index.shtml.

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

No Impact. According to the California Department of Forestry and Fire Protection (CAL FIRE) and City of Bakersfield, the project site is in an area that is not identified as a Very High, High, or Moderate Fire Hazard Severity Zone.[31,32] The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Therefore, no impact would occur.

[31] California Department of Forestry and Fire Protection, Find Your Fire Hazard Severity Zone (FHSZ), available at: https://experience.arcgis.com/experience/5065c998b4b0462f9ec3c6c226c610a9, accessed March 5, 2026.

[32] City of Bakersfield, Fire Hazard Severity Zones in Local Responsibility Areas, available at: https://content.civicplus.com/api/assets/ca-bakersfield/1cb624df-5c64-473b-95e4-c6b51c7537ea?cache=1800, accessed March 5, 2026.

3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. result in a substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

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

Less than Significant Impact.

Surface Water

During project construction, stormwater runoff from precipitation events could cause exposed and stockpiled soils to be subject to erosion and convey sediments into municipal storm drain systems. In addition, on-site watering activities to reduce airborne dust could contribute to pollutant loading in runoff. Pollutant discharges associated with the storage, handling, use and disposal of chemicals, adhesives, coatings, lubricants, and fuel could also occur. Since the project site exceeds one acre, the proposed project would be required to obtain a NPDES Construction General Permit from the SWRCB, which would require the project to develop a SWPPP, which would identify the sources of sediment and other pollutants that affect the quality of stormwater discharges, describe and ensure the implementation of site-specific BMPs to

reduce or eliminate sediment and other pollutants in stormwater and non-stormwater discharges, and convey a plan to restore erosion protection and site hydrology post-construction. With adherence to regulatory requirements, construction of the proposed project would not result in discharge that would violate any water quality standard or waste discharge requirements, or otherwise substantially degrade surface water quality. Therefore, construction-related impacts on surface water quality would be less than significant.

During operation of the proposed project, stormwater runoff from precipitation also has the potential to carry urban pollutants into municipal storm drains. However, the project site would remain predominantly pervious, with the exception of the areas for the equipment pads, including the pad for the BESS, and posts. The proposed project would be required to convey a plan to restore erosion protection and site hydrology post-construction, as required by the SWPPP, which would ensure that water quality standards are not violated and surface water quality is not degraded. Therefore, with adherence to regulatory requirements, impacts to surface water quality during operation of the proposed project would be less than significant.

Groundwater

There are no existing groundwater wells within the project site. According to SWRCB groundwater data, one well (ID 30S27E05K001M) is located approximately 600 feet southwest of the project site.[33] However, according to the CSUB Campus Master Plan EIR, this well, which recorded a groundwater depth of 153 feet below ground surface in 1994, was destroyed in October 2006 under a permit from the Kern County Environmental Health Services Department.[34] Additionally, the site-specific geotechnical assessment included test borings ranging from approximately 20 to 50 feet below existing site grade that did not encounter groundwater; thus, the construction for the proposed project is not expected to encounter groundwater.

Upon completion of the proposed project, the project site would remain predominantly pervious, with the exception of the areas for the equipment pads, including the pad for the BESS, and posts. The solar energy storage system would be automated and remotely monitored with onsite visits limited to periodic inspections and maintenance. Vegetation would be managed and maintained with the use of equipment and materials that are standard for landscaping uses, and small amounts of commercially available hazardous materials may be used for regular cleaning and maintenance activities. These hazardous materials are not anticipated to substantially degrade groundwater quality. The proposed project would required to convey a plan to restore erosion protection and site hydrology post-construction, as required by the SWPPP, which would ensure that water quality standards are not violated and ground water quality is not degraded. Furthermore, the proposed project would not involve installation or operation of water/extraction wells during operation that could impact groundwater quality. Therefore, the proposed project would not result in discharges that would violate any groundwater quality standard or waste discharge requirement associated with groundwater protection, and impacts would be less than significant.

[33] California State Water Resources Control Board, GAMA Groundwater Information System, available at: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/, accessed March 5, 2026.

[34] California State University, Bakersfield, 2007, Draft Environmental Impact Report, Campus Master Plan Update, State Clearinghouse No. 2006111133.

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?

Less than Significant Impact. The project site is located within the Kern County Subbasin of the San Joaquin Valley Groundwater Basin.[35] As discussed above, there are no existing groundwater wells within the project site, and the proposed project construction activities would not require dewatering or other withdrawals of groundwater. In addition, although the proposed project would introduce impervious surfaces to some areas of the site, the equipment pads, including the pad for the BESS, and posts for the solar panels would not comprise a very large surface area relative to the rest of the site. A substantial amount of pervious surfaces would remain within the project site to allow for water to percolate through soil. Furthermore, the proposed project would not involve the installation or operation of water/extraction wells, and the proposed project would not introduce occupants who would generate new water demand. Therefore, the proposed project would not decrease groundwater supplies or interfere substantially with groundwater recharge such that the proposed project would impede sustainable groundwater management of the basin, and impacts would be less than significant.

c) 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:

i. Result in a substantial erosion or siltation on- or off-site?

Less than Significant Impact. The project site does not contain any streams or rivers. Although located to the west of the Arvin-Edison Canal, the project site does not drain into the canal. As discussed above, during project construction, stormwater runoff from precipitation events could cause exposed and stockpiled soils to be subject to erosion and convey sediments into the existing municipal storm drain system on campus. In addition, on-site watering activities to reduce airborne dust could contribute to pollutant loading in runoff. Pollutant discharges associated with the storage, handling, use and disposal of chemicals, adhesives, coatings, lubricants, and fuel could also occur. However, as discussed in Section 3.10(a), the project would be required to develop a SWPPP, which would identify the sources of sediment and other pollutants that affect the quality of stormwater discharges, describe and ensure the implementation of site-specific BMPs to reduce or eliminate sediment and other pollutants in stormwater and non-stormwater discharges, and convey a plan to restore erosion protection and site hydrology post-construction. Furthermore, although the proposed project would introduce impervious surfaces to some areas of the site, the equipment pads, including the pad for the BESS, and posts for the solar panels would not comprise a substantial area relative to the rest of the site. Therefore, with adherence to regulatory requirements, the proposed project would not substantially alter the project site's drainage patterns in a manner that would result in substantial erosion or siltation on- or off-site, and impacts would be less than significant.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Less than Significant Impact. Under existing conditions, the project site is relatively flat with little elevation change throughout. The project site is comprised of an existing soccer field and

[35] California State Water Resources Control Board, Sustainable Groundwater Management Act, Kern County Subbasin, available at: https://www.waterboards.ca.gov/water_issues/programs/sgma/groundwater_basins/kern-county-subbasin.html.

undeveloped land and is, thus, 100 percent pervious. Although the proposed project would introduce impervious surfaces to some areas of the site, the equipment pads, including the pad for the BESS, and posts for the solar panels would not comprise a very large surface area relative to the rest of the site and would not substantially increase the rate or amount of surface runoff. As discussed in Section 3.10(a), the project would be required to develop a SWPPP, which would require a plan to restore site hydrology post-construction. Runoff would drain to the existing stormwater drainage system, and development of the proposed project would not significantly increase the amount of impervious surfaces on or runoff from the project site that would result in flooding on- or offsite. Therefore, impacts would be less than significant.

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?

Less than Significant Impact. As described above, during construction, stormwater runoff from precipitation events could cause exposed and stockpiled soils to be subject to erosion and convey sediments into the existing municipal storm drain system. In addition, on-site watering activities to reduce airborne dust could contribute to pollutant loading in runoff. Pollutant discharges associated with the storage, handling, use and disposal of chemicals, adhesives, coatings, lubricants, and fuel could also occur. However, the proposed project would be required to implement dust and erosion control measures as required by the SWPPP to prevent stormwater pollution during construction. Following construction, although the proposed project would introduce impervious surfaces to some areas of the site and potentially increase runoff, the equipment pads, including the pad for the BESS, and posts for the solar panels would not comprise a substantial surface area relative to the rest of the site. As discussed in Section 3.10(a), the project-specific SWPPP would require a plan to restore site hydrology post-construction. Runoff would continue to drain into the existing stormwater drainage system, and development of the proposed project would not significantly increase the amount of impervious surfaces on or runoff from the project site such that the capacity of the existing stormwater drainage system would be exceeded. Therefore, impacts would be less than significant.

iv. Impede or redirect flood flows?

Less than Significant Impact. According to FEMA, the project site is not located in a special flood hazard area and is located outside of areas that have at least a 0.2 percent annual chance of flooding (i.e., a 500-year floodplain).[36] As described above, while the Kern River is located north of the CSUB campus, there are no water courses or rivers within or immediately surrounding the project site that pose a flooding risk. Under existing conditions, the project site is relatively flat with little elevation change throughout. Although the proposed project would introduce impervious surfaces to some areas of the site, the equipment pads, including the pad for the BESS, and posts for the solar panels would not comprise a substantial surface area relative to the rest of the site and would not substantially increase the rate or amount of surface runoff. Therefore, the proposed project would not substantially alter the existing drainage pattern of the site in a manner which would impede or redirect flood flows, and impacts would be less than significant.

[36] FEMA, National Flood Insurance Program, Flood Insurance Rate Map, Revised October 21, 2021, Map Number 06029C2276F.

d) Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less than Significant Impact. As discussed above, the project site is not located in a special flood hazard area according to FEMA.[37]

A tsunami is a large ocean wave that is generated by an underwater seismic disturbance, such as sudden faulting or landslide activity. The project site is located inland, approximately 88 miles east of the Pacific Ocean. Thus, the project would not be susceptible to tsunami-related impacts.[38]

Seiches are earthquake-induced waves in enclosed bodies of water, such as lakes or reservoirs. According to the Metropolitan Bakersfield General Plan Safety Element, if an earthquake causes a break in Isabella Dam, located 40 miles northeast of the project site, release of the entire lake storage could result in flooding 60 square miles of Metropolitan Bakersfield and surrounding areas.[39] To address potential hazards, the U.S. Army Corps of Engineers (USACE) continues to oversee the safety and operation of the dam, as demonstrated by the completion of the Isabella Dam Safety Modification Project in 2022. Prior to the project, USACE dam safety experts considered Isabella Dam to be one of the highest-risk dams in the USACE portfolio for failure or overtopping. The modification project addressed several deficiencies by raising the main and auxiliary dams 16 feet and creating a new emergency spillway to greatly lower flood risk for more than 400,000 people downstream of Isabella Lake.[40] Due to the improved dam safety and flood control infrastructure, the project site would not be at substantial risk of inundation from a seiche. Therefore, the proposed project would not risk release of pollutants due to inundation from seiches, and impacts would be less than significant.

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

Less than Significant Impact. As discussed above, the proposed project would be required to develop and implement a SWPPP, which would reduce or eliminate the discharge of potential pollutants from stormwater runoff. With adherence to regulatory requirements, the proposed project would not conflict with or obstruct the implementation of any water quality control plan.

The project site is located within the Kern County Subbasin, which is a critically overdrafted subbasin with an area of approximately 1.78 million acres and 20 groundwater sustainability agencies.[41] Pursuant to the Sustainable Groundwater Management Act, the subbasin's sustainability agencies were required to prepare a Groundwater Sustainability Plan to achieve sustainable groundwater management within 20 years. For the Kern County Subbasin, sustainability will be demonstrated by eliminating the chronic lowering of groundwater levels caused by overdraft conditions and avoiding undesirable results for groundwater levels,

[37] FEMA, National Flood Insurance Program, Flood Insurance Rate Map, Revised October 21, 2021, Map Number 06029C2276F.
[38] California Department of Conservation, California Geological Survey, Tsunami Hazard Area Map, available at: https://maps.conservation.ca.gov/cgs/informationwarehouse/ts_evacuation/, accessed March 15, 2026.
[39] City of Bakersfield, 2002, updated January 20, 2016, Metropolitan Bakersfield General Plan, Chapter VIII – Safety Element.
[40] U.S. Army Corps of Engineers, 2024, News Release, USACE garners prestigious NAC award for Isabella Dam Safety Modification Project, available at: https://www.spk.usace.army.mil/Media/News-Releases/Article/3803234/usace-garners-prestigious-nac-award-for-isabella-dam-safety-modification-project/.
[41] California State Water Resources Control Board, 2025, Kern County Subbasin Staff Review of 2025 Draft GSPs, available at: https://sjvwater.org/wp-content/uploads/2025/09/202509-kern-staff-review.pdf.

groundwater storage, land subsidence, and groundwater quality.[42] As previously discussed, there are no existing groundwater wells within the project site, and the proposed project construction activities would not require dewatering or other withdrawals of groundwater. During both construction and operation, the proposed project would adhere to the project-specific SWPPP which would ensure that water quality is not impaired. Furthermore, the proposed project would not involve the installation or operation of water/extraction wells, and the proposed project would not generate occupants who would generate new water demand. Thus, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. Therefore, impacts related to conflict with or obstruction of implementation of a sustainable groundwater management plan would be less than significant.

[42] California State Water Resources Control Board, 2025, Kern County Subbasin Staff Review of 2025 Draft GSPs, available at: https://sjvwater.org/wp-content/uploads/2025/09/202509-kern-staff-review.pdf.

3.11 Land Use and Planning

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

a) Would the project physically divide an established community?

No Impact. The proposed project would involve the installation of a ground-mounted PV solar energy system and associated electrical components within a primarily undeveloped portion of the CSUB campus along the eastern boundary. Residential neighborhoods are located to the east of the project site but are outside of the CSUB boundary and separated by the Arvin-Edison Canal and a transmission right-of-way. Therefore, the proposed project would not physically divide an established community, and no impact would occur.

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?

No Impact. CSUB is an entity of the CSU, and the campus is state-owned property. Therefore campus development is not subject to local planning or land use regulations. Instead, campus development is required to comply with the design guidelines, development standards, and other development assumptions set forth in the physical master plans developed for each campus. The CSUB Campus Master Plan is the master plan that governs development on the campus, including the project site. While two intramural baseball fields were planned for the project site under the CSUB Campus Master Plan, other athletic facilities have been constructed on campus and the intramural fields are no longer needed in their original planned locations within the current project site boundary. Additionally, the southernmost portion of the project site, south of the soccer field, overlaps the ESA. The purpose of the ESA is to provide an area dedicated to research and teaching to support the enrichment of environmental instruction at CSUB. However, the proposed project would only overlap less than 2 acres of the 20-acre ESA and has been designed to avoid the planted Fremont cottonwood forest and woodland within the ESA. Additionally, as part of this project, CSUB would require administrative project approvals by CSU BOT in accordance with the CSU BOT Executive Order 747: Real Property Development Projects, including a Minor Master Plan Revision, and CEQA approvals. The environmental effects of the proposed project are analyzed throughout this IS/MND. As concluded in this IS/MND, impacts related to the construction and operation of the proposed project would be less than significant. Additionally, the proposed project would be required to comply with the CSU State University Administrative Manual, through provisions in the construction contractor requirements, which includes requirements related to construction, hazardous materials, utilities, vehicle and pedestrian controls, storm water pollution prevention, and disposal of waste. Therefore, the project would not conflict with any applicable land use plan, policy, or regulation, and no impact would occur.

3.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact 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 a value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

a) Would the project result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

No Impact. The project site is located within a Mineral Resource Zone (MRZ) designated as MRZ-3, which indicates the presence of known or inferred mineral occurrences of undetermined significance.[43] The project site is not within an area designated as MRZ-2, where adequate information indicates that significant mineral resources have been identified. The project site is located within the CSUB campus and no mineral extraction currently occurs, or has historically occurred, within the campus. Furthermore, the proposed project would not include any mineral extraction activities. In addition, no oil wells are present within the project site.[44] Therefore, implementation of the proposed project would not result in the loss of availability of a known mineral resource of value, and no impact would occur.

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?

No Impact. As described in Section 3.12(a), the project site is not located on land designated as MRZ-2, which identifies areas where adequate information indicates significant mineral resources. The project site is located within the CSUB campus and no mineral extraction currently occurs, or has historically occurred, within the campus. Additionally, the CSUB campus does not contain any oil wells, and no oil extraction occurs within the campus. Therefore, implementation of the proposed project would not result in the loss of availability of a locally important mineral resource, and no impact would occur.

[43] California Department of Conservation, California Geological Survey, Mineral Land Classification [Map], available at: https://maps.conservation.ca.gov/cgs/minerals/?page=Mineral-Land-Classification, accessed March 12, 2026.
[44] California Department of Conservation, Well Finder [Map], available at: https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx, accessed February 18, 2026.

3.13 Noise

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

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?

Less than Significant Impact. Sound is technically described in terms of the loudness (amplitude) and frequency (pitch). The standard unit of measurement for sound is the decibel (dB). The human ear is not equally sensitive to sound at all frequencies. The A-weighted scale, abbreviated dBA, reflects the normal hearing sensitivity range of the human ear.

The noise analysis is discussed using equivalent noise level (L_{eq}) and Community noise equivalent level (CNEL). L_{eq} is the average noise level on an energy basis for a specific time period. The L_{eq} for one hour is the average energy noise level during the hour. The average noise level is based on the energy content (acoustic energy) of the sound. L_{eq} can be thought of as the level of a continuous noise which has the same energy content as the fluctuating noise level. The equivalent noise level is expressed in units of dBA. The CNEL is the time average A-weighted noise level during a 24-hour day that includes the addition of 5 dBA to measured noise levels between the hours of 7:00 pm and 10:00 pm and the addition of 10 dBA to noise levels between the hours of 10:00 pm and 7:00 am to account for noise sensitivity in the evening and nighttime, respectively.

Noise is generally defined as unwanted sound. The degree to which noise can impact the human environment ranges from levels that interfere with speech and sleep (annoyance and nuisance) to levels that cause adverse health effects (hearing loss and psychological effects). Human response to noise is subjective and can vary greatly from person to person. Factors that influence individual response include the intensity, frequency, and pattern of noise, the amount of background noise present before the intruding noise, and the nature of work or human activity that is exposed to the noise source.

Studies have shown that the smallest perceptible change in sound level for a person with normal hearing sensitivity is approximately 3 dBA. A change of at least 5 dBA would be

noticeable and may evoke a community reaction. A 10-dBA increase is subjectively heard as a doubling in loudness and would likely cause a negative community reaction. Noise levels decrease as the distance from the noise source to the receiver increases. Noise levels generated by a stationary noise source, or "point source," will decrease by approximately 6 dBA over hard surfaces (e.g., pavement) for each doubling of the distance. For example, if a noise source produces a noise level of 89 dBA at a reference distance of 50 feet, then the noise level would be 83 dBA at a distance of 100 feet over hard surface from the noise source, 77 dBA at a distance of 200 feet, and so on. Noise levels generated by a linear source (such as a roadway) decrease by approximately 3 dBA over hard surfaces for each doubling of the distance.

Summary of Applicable Noise Regulations/Standards

CSUB is an entity of the CSU, and the campus is state-owned property. Therefore, campus development is not subject to local planning or land use regulations. However, the 2019 CSU CEQA Handbook has not established significance thresholds for noise. Therefore, City of Bakersfield noise regulations and standards are used to assess the potential for community impacts. The City of Bakersfield has established noise standards to control unnecessary, excessive and annoying noise. The noise regulations are provided in Chapter 9.22 of the City of Bakersfield Municipal Code. Bakersfield Municipal Code Section 9.22.030 states that it is unlawful for any person to willfully make or continue, or allow to be made or continued, any loud, unnecessary noise which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to persons residing within one thousand feet of the noise source.

Construction Threshold

Construction noise is governed by Bakersfield Municipal Code Section 9.22.050 and the Noise Ordinance, which prohibits construction, including the operation of motorized landscaping equipment, between the hours of 9:00 p.m. and 6:00 a.m. Monday through Friday, and between 9:00 p.m. and 8:00 a.m. on the weekend. The provisions of Bakersfield Municipal Code Section 9.22.050 shall not apply to any construction work performed 1,000 feet or more from the nearest residential dwelling. Any deviation from these restrictions must be approved by the City Manager prior to the activity commencing. The City has not established a quantitative standard for construction noise. Thus, this analysis uses the Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual, which states that an 80 dBA, L_{eq} (8-hour) is a reasonable guideline for assessing daytime noise at residential uses. Thus, a construction impact related to noise would occur if the proposed project would exceed the 80 dBA, L_{eq} (8-hour) significance threshold.

Operational Thresholds

The City of Bakersfield Metropolitan Bakersfield General Plan - Noise Element provides a means for protecting local citizens from the harmful effects of excessive exposure to noise. The General Plan outlines land use compatibility standards as a guideline for locating new land uses, which have been adopted from the California Office of Noise Control. Table 3.13-1 shows the land use compatibility standards. Thus, an operational impact related to noise would occur if the proposed project (on- and off-site sources) would cause the affected noise-sensitive uses to be exposed to exterior noise levels in excess of 65 dB CNEL and/or would exceed the performance standards listed in Table 3.13-2.

Table 3.13-1: Land Use Compatibility for Community Noise Environments

Land Use Category	Community Noise Exposure: Day-Night Average Exterior Sound Level (dBA, CNEL)						
	50	55	60	65	70	75	80
Residential Single-Family Duplex, Mobile Home	A	C	C	C	N	U	U
Residential Multi-Family	A	A	C	C	N	U	U
Transient Lodging, Motel, Hotel	A	A	C	C	N	U	U
Schools, Library, Church, Hospital, Nursing Home	A	A	C	C	N	N	U
Auditorium, Concert Hall, Amphitheater	C	C	C	C/N	U	U	U
Sports Arena, Outdoor Spectator Sports	C	C	C	C	C/U	U	U
Playground, Neighborhood Park	A	A	A	A/N	N	N/U	U
Golf Course, Riding Stable, Water Recreation, Cemetery	A	A	A	A	N	A/N	U
Office Building, Business, Commercial and Professional	A	A	A	A/C	C	C/N	N
Agriculture, Industrial, Manufacturing, Utilities	A	A	A	A	A/C	C/N	N

A = Normally Acceptable - Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
C = Conditionally Acceptable - New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply system or air conditioning will normally suffice.
N = Normally Unacceptable - New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
U = Clearly Unacceptable - New construction or development should generally not be undertaken.
Source: City of Bakersfield, Metropolitan Bakersfield General Plan - Noise Element, December 2022.

Table 3.13-2: Exterior Noise Level Performance Standards - Operational

Cumulative number of minutes in any one-hour time period	Daytime 7:00 a.m. to 10:00 p.m.	Nighttime 10:00 pm to 7:00 am
30	55	50
15	60	55
5	65	60
1	70	65
0	75	70

Source: City of Bakersfield, Metropolitan Bakersfield General Plan – Noise Element, December 2022.

Sensitive Receptors and Existing Noise Levels

Noise-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas may be considered noise-sensitive and warrant unique measures for protection from intruding noise. Sensitive receptors in proximity to the project site are included in Table 3.13-3 and shown in Figure 8.

Table 3-13-3: Sensitive Receptors

Sensitive Receptor	Distance to Project Site
CSU Student Housing East located north of Kroll Way	300
Residences located east of the project site	400
Residences located northeast of the project site	460
The Vineyard Park	750

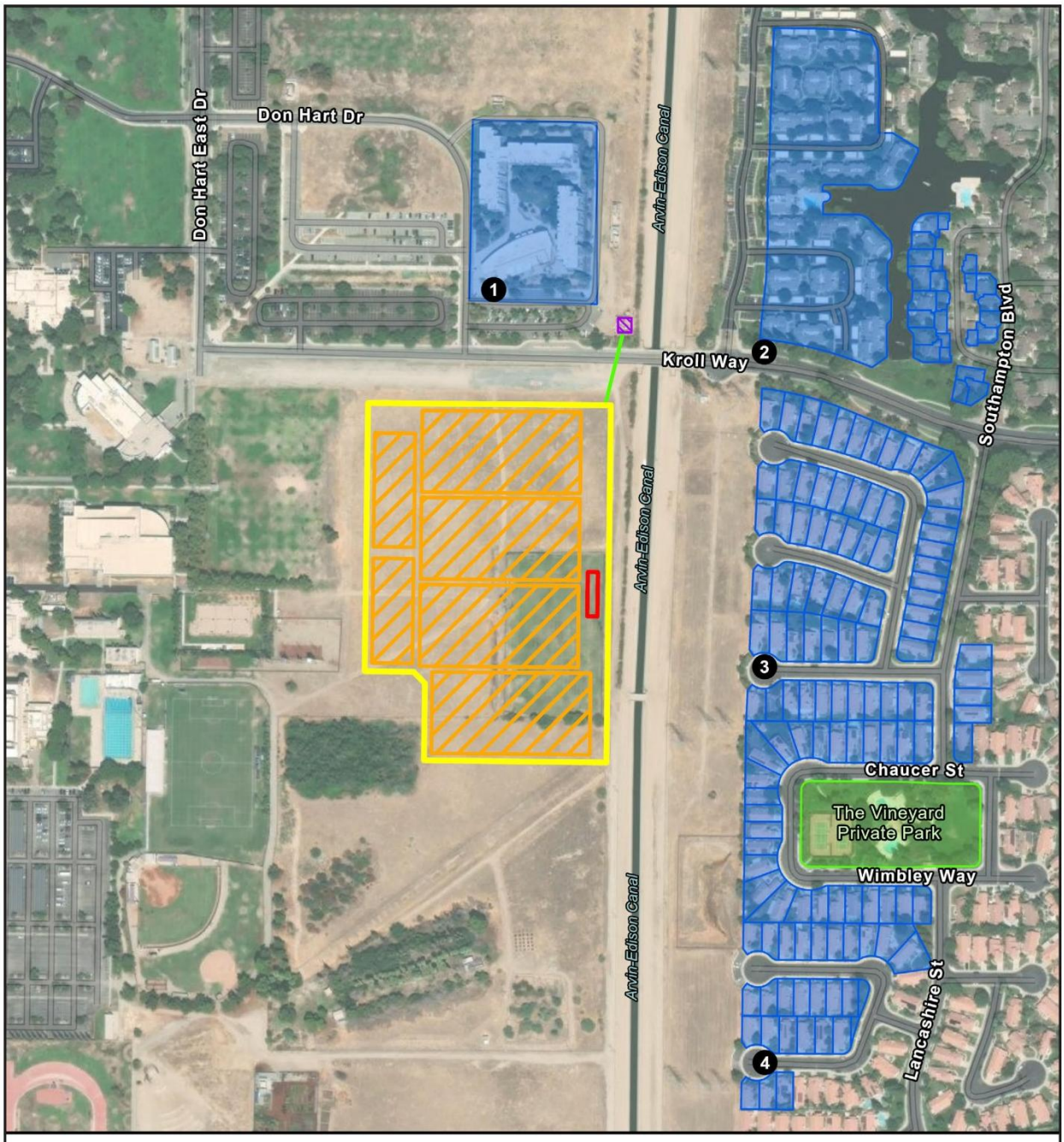
Source: TAHA, 2026.

The existing ambient noise environment near the project site is predominantly characterized by vehicular traffic and by occasional aircraft flyovers. To characterize the existing noise environment, ambient noise was monitored using a SoundPro DL Sound Level Meter. Short-term measurements were taken in 15-minute increments on February 12, 2026, from 12:30 p.m. to 2:00 p.m. This time of day represents a typical construction time without the added noise source of peak hour traffic. Monitored noise levels ranged from 49.9 to 61.8 dBA, L_{eq}. The monitoring locations are shown in Figure 1 and monitored noise levels are shown in Table 3.13-4.

Table 3-13-4: Existing Ambient Noise Levels

Noise Site	Noise Monitoring Location	Measured Noise Levels (dBA, L_{eq})
1	CSUB Student Housing East	50.7
2	Residences (8200 Kroll Way)	61.8
3	Residences (8225 Birmingham Street)	51.6
4	Residences (8221 Newcastle Street)	49.9

Source: TAHA, 2026.



CALIFORNIA STATE UNIVERSITY, BAKERSFIELD
GROUND MOUNT SOLAR AND BATTERY PROJECT

Michael Baker INTERNATIONAL

Source: TAHA, 2026

Noise Monitoring Locations and Sensitive Receptors

Figure 8

Construction

Construction-related noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers (including natural topographic features). The noise analysis assumed a direct line-of-sight between noise-generating construction activities and the sensitive receptors. Construction activities would require the use of numerous pieces of noise-generating equipment. Typical noise levels from various types of equipment that would be used during construction are listed in Table 3.13-5. Noise levels from individual pieces of equipment used during typical construction range between typically are between 70.3 dBA and 81.0 dBA, L_{eq} at 50 feet. Impact pile driving would generate a noise level of approximately 94.3 dBA, L_{eq} at 50 feet.

Table 3-13-5: Construction Equipment Noise Levels

Construction Equipment	Noise Level at 50 feet (dBA, L_{eq})
Backhoe	73.6
Compressor (air)	73.7
Crane	72.6
Dozer	77.7
Drill Rig Truck	72.1
Flat Bed Truck	70.3
Front End Loader	75.1
Gradall	79.4
Grader	81.0
Impact Pile Driver	94.3
Roller	73.0

Source: Federal Highway Administration, Roadway Construction Noise Model, Version 1.1, 2008; California Harbors and Navigation Code, Section 654.04 (a).

Table 3.13-6 lists the combined construction equipment noise levels by phase. The phased noise level is the combination of all construction equipment for each phase from various combinations of equipment that would most likely be used concurrently at the same location. Detailed equipment lists and calculations are included in Appendix D.

Table 3.13-6: Phased Construction Noise Levels

Construction Phase[1]	Combined Noise Level at 50 feet (dBA, $L_{eq\ (8\text{-}hour)}$)
Site Preparation	84.1
Gravel Access Road Installation	81.3
Pile Driving/Module Mounting	94.5
Electrical Wiring	81.8
Conduit Line Installation	80.1

[1] For the purposes of the noise analysis, the gravel road installation and conduit line installation was separated into its own construction phase.
Source: Federal Highway Administration, *Roadway Construction Noise Model*, Version 1.1, 2008.

Table 3.13-7 presents the estimated maximum construction noise levels at sensitive receptors within the project vicinity during typical construction. Table 3.13-8 presents potential construction noise levels for impact pile driving. Table 3.13- 9 presents construction noise levels during trenching required for the conduit line installation and connection to the existing substation located north of Kroll Way. Construction activity would conform to the allowable hours of construction in the Bakersfield Municipal Code from 6:00 a.m. to dusk Monday through Friday. Construction activities, including pile driving, would not expose sensitive land uses to a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the *Metropolitan Bakersfield General Plan - Noise Element* or Bakersfield Municipal Code. As shown in Tables 3.13-7 through 3.13-9, noise levels would not exceed the 80-dBA, $L_{eq\ (8\text{-}hour)}$ construction significance threshold from the Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual at any sensitive receptor during any of the construction phases. Therefore, the proposed project would result in a less than significant impact related to on-site construction noise.

Table 3.13-7: Construction Noise Levels at Sensitive Receptors – Typical Construction

Sensitive Receptor	Distance from Project Site (feet)	Construction Noise Level at Receptor (dBA, $L_{eq\ (8\text{-}hour)}$)	Exceed Threshold? (80 dBA, $L_{eq\ (8\text{-}hour)}$)
CSUB Student Housing East located north of Kroll Way	300	68.5	No
Residences located to the east of the project site	400	66.0	No
Residences located northeast of the project site	460	64.8	No
The Vineyard Park	750	56.1	No

Source: TAHA, 2026.

Table 3.13-8: Construction Noise Levels at Sensitive Receptors – Impact Pile Driving

Sensitive Receptor	Distance from Project Site (feet)	Construction Noise Level at Receptor (dBA, $L_{eq\ (8\text{-}hour)}$)	Exceed Threshold? (80 dBA, $L_{eq\ (8\text{-}hour)}$)
CSUB Student Housing East located north of Kroll Way	300	78.9	No
Residences located to the east of the project site	400	76.4	No
Residences located northeast of the project site	460	75.2	No
The Vineyard Park	750	66.5	No

Source: TAHA, 2026.

Table 3.13-9: Construction Noise Levels at Sensitive Receptors – Conduit Line Installation

Sensitive Receptor	Distance from Project Site (feet)	Construction Noise Level at Receptor (dBA, $L_{eq\ (8\text{-}hour)}$)	Exceed Threshold? (80 dBA, $L_{eq\ (8\text{-}hour)}$)
CSUB Student Housing East located north of Kroll Way	200	68.1	No
Residences located to the east of the project site	420	61.6	No
Residences located east of the project site and north of Kroll Way	390	62.3	No
The Vineyard Park	1,400	51.2	No

Source: TAHA, 2026.

Haul trucks associated with construction activity would potentially increase noise levels along the haul route. Construction vehicles would access the campus from Stockdale Highway, then travel south on Don Hart Dr. E and east on Kroll Way to reach the project site. The greatest number of hourly haul truck trips would occur during the gravel road installation phase for construction of the access road, which would require up to approximately eight daily truck round trips (16 one-way trips) or approximately four haul truck pass-by trips per hour.[45]

Incremental increases in noise levels were predicted using the Federal Highway Administration's Traffic Noise Model (TNM) Version 3.2. More detailed information is included in Appendix D. The existing noise level for Stockdale Highway was calculated in TNM utilizing publicly available traffic data from the Kern Council of Governments.[46] Existing noise levels for CSUB Student Housing East and residences along Kroll Way were obtained from noise monitoring locations one and two shown in Figure 8. Modeling was not completed on Don Hart

[45] Assumes haul trucks occur within the first half of a typical 8-hour construction day.
[46] Kern Council of Governments, 2025, Traffic Counts, Location 738 Stockdale Highway West of Don Hart Drive East.

Drive East, as no sensitive receptors are present. As shown in Table 3.13-10, four haul truck trips per hour would generate a noise level of approximately 39.5 to 45.8 dBA, L_{eq} at residences and CSUB Student Housing East along Kroll Way. Haul trucks would generate a noise level of approximately 52.1 dBA, L_{eq} along Stockdale Highway. A perceptible incremental increase in noise (3 dBA or more) would not occur at sensitive receptors. Therefore, the proposed project would result in a less than significant impact related to haul truck noise.

Table 3.13-10: Haul Truck Noise Levels

Modeling Location	Existing Noise Level (dBA, L_{eq})	Haul Truck Noise (dBA, L_{eq})	Incremental Increase (dBA, L_{eq})
Residences South of Stockdale Highway	68.4	52.1	0.0
CSUB Student Housing East	50.7	45.8	0.0
Residences North of Kroll Way	61.8	39.8	0.0
Residences South of Kroll Way	61.8	39.5	0.0

Source: TAHA, 2026.

Operation

The primary source of operational noise would be generated by the BESS. The BESS would generate a noise level of approximately 75 dBA at three feet related to ambient hum of the batteries. The equipment would operate continuously, and the resultant 24-hour noise level would be approximately 82 dBA CNEL at three feet, which includes additional weighting for noise occurring during nighttime hours to account for increased sensitivity. The nearest sensitive receptors are residences located approximately 400 feet to the east of the proposed BESS location. The existing hourly noise level at these receptors is approximately 50.7 dBA, L_{eq}. The CNEL noise level was calculated assuming the daytime noise level of 50.7 dBA, L_{eq} between 7:00 a.m. and 7:00 p.m. and 45 dBA, L_{eq} between 7:00 p.m. and 7:00 a.m. to account for quieter nighttime noise levels. The calculated existing CNEL noise level is approximately 53 dBA.

The BESS noise level at the nearest sensitive receptors to the east would be 39.5 dBA, CNEL which would be approximately 14 dBA, CNEL lower than the existing noise level of 53 dBA, CNEL. Thus, an incremental increase in noise would not occur at sensitive receptors to the east of the proposed BESS. Operation of the BESS would not exceed the land use compatibility standards shown in Table 3.13-1 or the exterior performance standards shown in Table 3.13-2. Therefore, operation of the proposed project would result in a less than significant impact.

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

Less than Significant Impact. A significant impact would occur if the proposed project would generate excessive groundborne vibration or groundborne noise levels. Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of vibration are trains, buses on rough roads, and construction activities, such as rock blasting, pile driving, and heavy earth-moving equipment. High levels of vibration may cause physical

personal injury or damage to buildings. However, vibration levels rarely affect human health. Instead, most people consider vibration to be an annoyance that may affect concentration or disturb sleep. In addition, high levels of vibration may damage fragile buildings or interfere with equipment that is highly sensitive to vibration (e.g., electron microscopes).

The Federal Transit Administration developed the Transit Noise and Vibration Impact Assessment Manual (September 2018), which presents vibration facts and guidance that is also applicable to land use development. The manual states that there are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to measure RMS. The VdB acts to compress the range of numbers required to describe vibration.

Summary of Applicable Vibration Regulations/Standards

Neither the 2019 CSU CEQA Handbook nor the City of Bakerfield have established significance thresholds for vibration. Therefore, federal guidance has been used to assess the potential for community impacts. The Transit Noise and Vibration Impact Assessment Manual (September 2018) includes criteria for assessing the potential for vibration damage during construction to different structure types. Table 3.13-11 shows the vibration damage criteria by structure type.

Table 3.13-11: Construction Vibration Damage Criteria

Building/Structural Category	PPV (inches/second)
I. Reinforced-concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

Source: Federal Transit Administration, 2018, *Transit Noise and Vibration Impact Assessment*.

Sensitive Receptors and Existing Vibration Levels

The land uses sensitive to increased vibration levels are identical to the receptors discussed above for noise. Based on field observations, the primary source of existing groundborne vibration in the vicinity of the project site is vehicular travel (e.g., standard cars, refuse trucks, delivery trucks, construction trucks, school buses, buses) on local roadways.

Construction

Construction activity can generate varying degrees of vibration, depending on the procedure and equipment. Construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of a construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, and to slight damage at the highest levels. In most cases, the primary concern regarding construction vibration relates to damage.

Activities that can result in damage include the use of vibration generating equipment in close proximity to sensitive structures. The nearest sensitive receptor is CSUB Student Housing East located approximately 300 feet to the north of construction activity at the project site. The appropriate threshold for these sensitive receptors would be 0.3 inches per second, which is applicable to standard structures. Typical vibration levels associated with construction equipment are provided in Table 3.13-12. For example, typical heavy equipment (e.g., large bulldozer) generates vibration levels of 0.089 inches per second at a distance of 25 feet. An impact pile driver is one of the most vibration intensive pieces of construction equipment and generates a typical vibration level of 0.644 inches per second and an upper vibration level of 1.518 inches per second. The vibration level generated by an impact pile driver in the upper range would be approximately 0.037 inches per second PPV at 300 feet and would not exceed the vibration damage threshold of 0.3 inches per second. As such, sensitive receptors further away would not have potential for vibration damage.

Conduit installation would require equipment such as a large bulldozer or drill rig, which generate vibration levels of 0.089 inches per second PPV at 25 feet. Conduit installation would occur within approximately 200 feet of CSUB Student Housing East to the north. At this distance, vibration levels would be approximately 0.004 inches per second PPV, which would not exceed the vibration damage threshold of 0.3 inches per second. Therefore, the proposed project would result in a less than significant impact related to structural damage from on-site construction vibration.

Table 3.13-12: Typical Outdoor Construction Equipment Vibration Levels

Equipment		PPV at 25 Feet (Inches/Second)	PPV at Distance (Inches/Second)		
			100 feet	200 feet	300 feet
Impact Pile Driver	Upper range	1.518	0.190	0.067	0.037
	Typical range	0.644	0.081	0.028	0.015
Drilling		0.089	0.011	0.004	0.002
Large Bulldozer		0.089	0.011	0.004	0.002
Loaded Truck		0.076	0.010	0.003	0.002
Excavator		0.040	0.005	0.002	0.001
Small Bulldozer		0.003	0.000	0.000	0.000

Source: Federal Transit Administration, 2018, *Transit Noise and Vibration Impact Assessment*; New Hampshire Department of Transportation, 2012, *Ground Vibrations Emanating from Construction Equipment*.

In addition to on-site construction activities, construction trucks on the roadway network have the potential to generate vibration. As mentioned above, construction truck trips would occur on an as-needed basis and would be spread throughout the construction period. According to the Federal Transit Administration's Transit Noise and Vibration Impact Assessment Manual (September 2018), rubber-tired vehicles, including trucks, rarely generate perceptible vibration, which is defined as 65 VdB.[47] It is not anticipated that project-related trucks would generate perceptible vibration adjacent to the roadway network. Therefore, the proposed project would result in a less than significant impact related to truck vibration.

[47] Federal Transit Administration, 2018, Transit Noise and Vibration Impact Assessment.

Operation

Operation of the proposed project would not result in a significant new source of operational vibration. Limited vibration would be generated by vehicles intermittently visiting the project site for maintenance activities. Rubber-tired vehicles, including trucks, rarely generate perceptible vibration, which is defined as 65 VdB. It is not anticipated that project-related vehicle trips would generate perceptible vibration adjacent to the roadway network. Therefore, the proposed project would result in a less than significant impact related to operational vibration.

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?

No Impact. A significant impact would occur if the project site is located within two miles of an airport or within an airport land use plan and the proposed project would expose people to excessive aircraft-related noise levels. The project site is not located within an airport land use plan and is not within two miles of a private airstrip or public airport. The nearest airport to the project site is the Bakersfield Municipal Airport, approximately five miles to the east. Therefore, the proposed project would not expose people to excessive aircraft-related noise levels, and no impact related to excessive airport noise would occur.

3.14 Population and Housing

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) 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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

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)?

No Impact. Due to the relatively low number of personnel required for project construction in the context of the metropolitan Bakersfield area and the temporary nature of construction jobs, no substantial population growth in the area would occur related to construction of the proposed project. Operation of the project would be automated and unstaffed, and would not require any new or permanent personnel. Thus, the proposed project would not induce population growth in an area. In addition, the proposed project would not include new housing or businesses that would directly induce population growth. The solar energy system would generate renewable energy for the campus and connect to an existing substation. The energy generated would serve the existing and future projected population of the campus. Therefore, the proposed project would not induce substantial population growth, and no impact would occur.

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

No Impact. The project site is currently undeveloped and does not contain any housing. Thus, implementation of the proposed project would not require the removal of any housing or displacement of people. Therefore, no impact would occur.

3.15 Public Services

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

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

i. Fire protection?

No Impact. The project site is located on a primarily undeveloped portion of the CSUB campus. Fire protection for the entire City including CSUB is provided by the Bakersfield Fire Department.[48] The project site is served by Fire Station Nos. 11 and 9, located approximately 1 mile northeast and 1.4 miles southeast of the site, respectively. Fire Station No. 11 is located at 7000 Stockdale Highway and Fire Station No. 9 is located at 7912 Westwold Drive.

An increased demand for fire protection is generally associated with new development, such as residential uses, or an increase in population. The project would involve the installation of a ground-mounted photovoltaic solar energy and associated electrical components, which would not represent new development that would require fire protection services. Occasional vegetation management of the electrical components would be required to maintain operations. An existing off-site campus operations center would continuously monitor the production and condition of the system. Furthermore, as discussed in Section 3.14, Population and Housing, the proposed project would not directly or indirectly induce population growth, and thus, would not result in an increased demand for fire protection services. Therefore, no new or physically altered fire protection facilities would be required to maintain acceptable service ratios,

[48] California State University, Bakersfield, 2017, Emergency Operations Plan, available at: https://www.csub.edu/police/emergency/preparedness/index.shtml.

response times or other performance objectives, and no impact would occur.

ii. Police protection?

No Impact. Police protection for CSUB is provided by the University Police Department, located on campus. The University funds and operates its own police services. Because the proposed project would be operated and monitored remotely via a SCADA system and an existing off-site campus operations center, it would not introduce activities that would increase demand for police services. The project would include security features including perimeter fencing, gates, and security lighting. As discussed above in Section 3.15(a)(i), the proposed project would not directly or indirectly induce population growth, and thus, would not result in an increased demand for police protection services. Therefore, no new or physically altered police protection facilities would be required to maintain acceptable service ratios, response times or other performance objectives, and no impact would occur.

iii. Schools?

No Impact. The demand for new or expanded school facilities is generally associated with an increase in housing, which would increase the population of school-aged children. Implementation of the proposed project would not increase the local population and does not include housing or permanent on-site employees. Therefore, the proposed project would not require the construction of additional schools or the expansion of existing schools, and no impact would occur.

iv. Parks?

No Impact. The demand for new or expanded parks is generally associated with an increase in population. As discussed above, implementation of the proposed project would not directly or indirectly induce population growth. Therefore, the proposed project would not require the construction of additional parks or the expansion of existing parks, and no impact would occur.

v. Other public facilities?

No Impact. The demand for other public facilities, such as libraries, is also generally associated with population growth. As discussed above, implementation of the proposed project would not directly or indirectly induce population growth. Therefore, the proposed project would not require the construction of additional public facilities or the expansion of public facilities, and no impact would occur.

3.16 Recreation

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

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?

No Impact. Neither the construction or operation of the proposed project would generate new permanent residents that would increase the use of existing neighborhood regional parks or other recreational facilities. The project would result in the removal of CSUB's practice soccer field and would preclude the development of two intramural baseball fields originally planned for the site. However, other athletic facilities have been constructed on campus, and the intramural fields are no longer needed in their original planned locations within the current project site boundary. An existing soccer field is located west of the project site, and the campus also has a baseball field and softball complex. Therefore, the project would not contribute to substantial physical deterioration of recreational facilities, and no impact would occur.

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?

No Impact. The proposed project does not include recreational facilities or require construction or expansion of recreational facilities that may have adverse physical effects on the environment. Therefore, no impact would occur.

3.17 Transportation

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

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

No Impact. Construction traffic would be temporary and limited to the duration of construction. Site access would be provided via Kroll Way, a single-lane road entering the eastern perimeter of the CSUB campus. Pedestrian crossings are located on the north side of Kroll Way, while the project site is on the south side, and no pedestrian walkways cross the project area. There are no transit stops adjacent to the project site. Designated bike lanes exist along Kroll Way.

Construction would not require any road closures; nonetheless, the University Police Department would be notified of construction activities. Emergency access to the project site and campus would be maintained at all times. Following construction, the project would not change the circulation system. Furthermore, the project would not generate substantial traffic, as the solar energy system would be operated and monitored remotely with only occasional maintenance visits. As a result, the project would not adversely affect roadway operations. Therefore, no impact would occur.

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)?

Less than Significant Impact. The 2019 CSU Transportation Impact Study Manual provides project types. notes that vehicle miles traveled (VMT) exceeding an applicable threshold may indicate a significant impact, while projects located within one-half mile of a major transit stop or high-quality transit corridor, or projects that reduce VMT compared to existing conditions, are generally presumed to have a less-than-significant transportation impact.[49] The Manual also identifies that projects generating fewer than 110 daily vehicle trips are screened out from further VMT analysis.

Construction of the project would result in temporary increases in VMT associated with construction workers and haul trucks. The peak VMT associated with construction would require

[49] Fehr & Peers, 2019, Transportation Impact Study Manual – VMT.

approximately eight daily truck trips. Construction of the proposed project would represent a typical construction project for the region, and thus, is not considered to be inconsistent with CEQA Guidelines Section 15064.3(b). Once operational, the solar energy system would be monitored remotely and would require only occasional maintenance visits, generating negligible VMT and well below the 110-trip screening threshold. The project is not expected to increase regional travel demand or conflict with the criteria identified in Section 15064.3(b). Therefore, impacts would be less than significant.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. Construction activities for the proposed project would occur within the boundaries of the CSUB campus. Operation of the proposed project would not introduce new geometric design features or incompatible uses to the road network. No changes to circulation would occur with implementation of the proposed project, and therefore, no impact would occur.

d) Would the project result in inadequate emergency access?

No Impact. As discussed above, construction activities would occur entirely within the CSUB campus, with construction vehicle access provided via Kroll Way. Construction would not require any road closures; nonetheless, the University Police Department would be notified of construction activities. Emergency access to the project site and campus would be maintained at all times and is not expected to interfere with emergency access to or through the project site. During operation, access conditions would remain unchanged, and the project would not alter existing circulation patterns. Therefore, the proposed project would not result in inadequate emergency access, and no impact would occur.

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☐	☐	☒
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☐	☒	☐

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

No Impact. As detailed in the Cultural and Paleontological Resources Identification Memorandum prepared for the proposed project, a records search was conducted on February 11, 2026, at the SSJVIC to identify previous cultural and tribal cultural resources studies and previously recorded cultural and tribal cultural resources within the CSUB campus and a quarter-mile radius. The records search results revealed that less than one percent of the CSUB main campus has been subjected to previous formal archaeological study. The records search also identified seven resources located within the quarter-mile search radius, five of which are located on campus. Only two of the five resources located on campus are formally recorded and none overlap the project site. As such, there are no known tribal cultural resources that exist within the project site that are eligible for listing on the CRHR or in a local register. Therefore, the project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the CRHR or in a local register of historical resources, and no impact would occur.

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Public Resources Code Section 5024.1(c)? In applying the criteria set forth in Public Resource Code Section 5024.1 (c), the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than Significant Impact with Mitigation Incorporated. The Native American Heritage Commission identified Native American tribal representatives who could potentially have specific and unreported knowledge of Native American cultural resources within the project site. Pursuant to AB 52, on March 6, 2026, CSUB notified five tribes of the project and invited them to consult on the potential for Native American resources within the project site.

As of the publication date of this IS/MND, the Tejon Indian Tribe responded but did not request consultation. A follow-up email was sent to the other tribes on the Native American Heritage Commission list on April 20, 2026. As of the publication date of this IS/MND, no other tribes have responded.

No specific tribal cultural resources were identified within the project site as a result of AB 52 consultation. Based on archival research and the field survey of the project site, the potential for the existence of tribal cultural resources is considered low to moderate. During the construction of the proposed project, unknown subsurface archaeological resources, including tribal cultural resources, could potentially be encountered during ground-disturbing activities. The proposed project would implement Mitigation Measure CUL-1, as described in Section 3.5, Cultural Resources, to retain a qualified archaeologist and monitor specific project activities. If tribal cultural resources are identified during the course of monitoring, the appropriate tribes would be notified. With implementation of Mitigation Measure CUL-1, impacts to tribal cultural resources would be less than significant.

3.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

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?

Less than Significant Impact. As described in Section 1.0, Project Description, the proposed project is a solar energy system that would be automated and unstaffed. Temporary personnel and the use of a water truck would be required to conduct periodic washing of the solar PV panels to remove debris and improve energy production up to two times per year. As such, the proposed project would not generate daily water demand that would require or result in the relocation or construction of new or expanded water facilities. No impacts related to water facilities would occur.

The proposed project would not include on-site restroom facilities, and no wastewater would be generated during project operations that would require conveyance to a wastewater treatment facility. Therefore, the proposed project would not require or result in the relocation or construction of new or expanded wastewater treatment facilities. No impacts related to wastewater treatment facilities would occur.

The CSUB campus has its own self-contained stormwater drainage system and contains several storm drainage retention basins and sumps that serve to contain the campus's

stormwater runoff on site. Post-construction, the project site would remain predominantly pervious, with the exception of the areas for the equipment pads, including the pad for the BESS, and posts. The increase in impervious surfaces from implementation of the proposed project would be considered nominal compared to the whole of the campus and would not alter the existing drainage pattern of the site. As such, the proposed project would not require or result in the relocation or construction of new or expanded stormwater drainage facilities. No impacts related to stormwater drainage facilities would occur.

The proposed project would develop a solar energy system that would connect to an existing substation to the north of the project site and tie into the PG&E grid system. The environmental effects of the construction of this new electric power system are analyzed throughout this IS/MND. As concluded in this IS/MND, impacts related to the construction and operation of the proposed project would be less than significant.

The proposed project would not require natural gas service. Therefore, the proposed project would not require or result in the relocation or construction of new or expanded natural gas facilities and no impact would occur.

The proposed project would install a control panel to monitor, manage, and analyze the solar energy system, including hardware and software for SCADA, the solar tracker, and fire protection. The environmental effects of the proposed project, which includes telecommunications features, are analyzed throughout this IS/MND. As concluded in this IS/MND, impacts related to the construction and operation of the proposed project would be less than significant. Accordingly, impacts related to the construction of new or expanded telecommunications facilities would also be less than significant.

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?

Less than Significant Impact. Water for the CSUB campus is supplied by the California Water Service Company (Cal Water). According to Cal Water's 2020 Urban Water Management Plan for the Bakersfield District, the projected supply and demand totals for a normal year in 2030 and 2035 are 62,681 acre-feet and 65,408 acre-feet, respectively.[50] In addition, the available purchased water and groundwater supplies are sufficient to meet the demands as needed during a single dry year and multiple dry year periods.[51]

As discussed above, the solar energy system would be automated and unstaffed, with the exception of the periodic washing of the solar PV panels that would be conducted up to two times per year. A water truck would be used to supply the water for the periodic washing, which would require nominal use of water that is anticipated to be supplied by Cal Water. Therefore, the proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years and impacts would be less than significant.

[50] California Water Service, 2021, 2020 Urban Water Management Plan – Bakersfield District, available at: https://www.calwater.com/docs/uwmp2020/BK_2020_UWMP_FINAL.pdf.
[51] Ibid.

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?

No Impact. As discussed above, the proposed project would not include on-site restroom facilities, and no wastewater would be generated during project operations that would require conveyance to a wastewater treatment facility. Therefore, the proposed project would not increase demand for wastewater treatment, and no impact related to wastewater treatment capacity would occur.

d) Would the project 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?

Less than Significant Impact. Solid waste generated on the CSUB campus is disposed of at the Bena Sanitary Landfill, located approximately 20 miles east of the project site. Bena Sanitary Landfill has a permitted capacity of 53 million cubic yards and approximately 24.4 million cubic yards of remaining capacity as of the last physical site survey in April 2025.[52]

As described above in Section 1.0, Project Description, the project site is currently primarily undeveloped and unpaved, except for a soccer field and dirt access roads. The proposed project would not require any demolition and would generate construction waste from vegetation clearing, removal of the practice soccer field fence, and packaging materials. Additionally, as discussed, the posts for the solar panels would be pile driven, which would not produce spoils. Fence posts would be installed using drilling methods, which would generate approximately 4,650 cubic yards of spoils which would be spread on-site rather than hauled off-site for disposal. During operation, the proposed project would be automated and unstaffed, with the exception of the periodic washing of the solar PV panels that would be conducted up to two times per year. Therefore, proposed project would produce minimal waste during construction and operation. The proposed project would not generate solid waste in excess of state or local standards or in excess of the capacity of the Bena Sanitary Landfill, and impacts would be less than significant.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact. Solid waste disposal services on the CSUB campus are provided by the City. As discussed above, the proposed project would not require demolition and would generate minimal construction waste. As required by CALGreen, the proposed project would recycle or salvage for reuse a minimum of 65 percent of any construction waste generated. Project operation would generate nominal waste as the proposed project would be automated and unstaffed with the exception of the washing of the solar PV panels that would occur a maximum of two times annually. Therefore, the project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste and impacts would be less than significant.

[52] Kern County, Public Works, 2025, Bakersfield Metropolitan (Bena) Sanitary Landfill Five-Year Permit Review and Solid Waste Facility Permit Application (SWIS 15-AA-0273).

3.20 Wildfire

	Potentially Significant Impact	Less Than Significant Impact 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

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?

No Impact. According to CAL FIRE and City of Bakersfield, the project site is located in a Local Responsibility Area (LRA) in an area that is not identified as a Very High, High, or Moderate Fire Hazard Severity Zone.[53,54] The nearest very high fire hazard severity zone (VHFHSZ) is located approximately 16 miles northwest of the project site, and the nearest high fire hazard severity zone is located approximately 5.6 miles northeast. Therefore, the project site is not located in or near a State Responsibility Area, or lands classified as VHFHSZ's, and would not substantially impair an adopted emergency response plan or emergency evacuation plan. Therefore, no impact would occur.

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?

No Impact. As discussed above, the project site is not located in or near a State Responsibility Area, or lands classified as VHFHSZ's. The project would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks in such areas or zones. Therefore, no impact would

[53] California Department of Forestry and Fire Protection, Find Your Fire Hazard Severity Zone (FHSZ), available at: https://experience.arcgis.com/experience/5065c998b4b0462f9ec3c6c226c610a9, accessed March 5, 2026.
[54] City of Bakersfield, Fire Hazard Severity Zones in Local Responsibility Areas, available at: https://content.civicplus.com/api/assets/ca-bakersfield/1cb624df-5c64-473b-95e4-c6b51c7537ea?cache=1800, accessed March 5, 2026.

occur.

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?

No Impact. As discussed above, the project site is not located in or near a State Responsibility Area or lands classified as VHFHSZ's. The project would not require the installation or maintenance of associated infrastructure in such areas and zones that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Therefore, no impact would occur.

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 downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. As discussed above, the project site is not located in or near a State Responsibility Area or lands classified as VHFHSZ's. The project would not expose people or structures to significant risks in such areas or zones, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, no impact would occur.

3.21 Mandatory Findings of Significance

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

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?

Less than Significant Impact with Mitigation Incorporated. As described in Section 3.4, Biological Resources, the proposed project has the potential to impact nesting birds, SJKF, burrowing owl, Bakersfield legless lizard, ~~and~~ San Joaquin coachwhip, and Crotch's bumble bee during construction. Mitigation Measure BIO-1, which would require pre-construction nesting bird surveys, would be implemented to reduce potential impacts to nesting birds to a less than significant level. Mitigation Measure BIO-2, which would require biological monitoring of construction activities for special-status species through daily pre-activity clearance surveys and provide the ability to halt work if an unanticipated special-status species is detected on-site, would reduce impacts to special-status species to a less than significant level. Mitigation Measure BIO-3 would require non-breeding season surveys and a pre-construction survey specifically for burrowing owl and coordination with CDFW if a burrowing owl is detected on-site to reduce impacts to burrowing owl to a less than significant level. Mitigation Measure BIO-4 includes a series of measures to avoid impacts to SJKF~~, which reflect the Incidental Take Permit that the University is in the process of obtaining for the species. These measures, which include~~ including scheduling, pre-construction survey, den monitoring and buffers if detected, ~~den collapse or sealing,~~ and implementation of BMPs, which would reduce impacts to SJKF to a less than significant level. Mitigation Measure BIO-5 would require preconstruction surveys for nesting Crotch's bumble bee, avoidance if the species is detected, and acquisition of an Incidental Take Permit if the species cannot be avoided.

Based on the above, the proposed project would not have the potential to 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, or reduce the number or restrict the range of a rare or endangered plant or animal. Impacts would be less than significant with mitigation.

As described in Section 3.5, Cultural Resources, the project site does not support any important examples of major periods in California history. Archival research and the field survey indicate the project area has low to moderate sensitivity for archaeological resources, and the potential to inadvertently discover previously unrecorded archaeological resources during project construction activities exists. Therefore, the proposed project would implement Mitigation Measure CUL-1 to retain a qualified archaeologist and monitor specific project activities to ensure that impacts to archaeological resources would be less than significant.

As discussed in Section 3.18, Tribal Cultural Resources, no known tribal cultural resources are located within the project site. However, based on archival research, the cultural resources field survey, the project site has a low to moderate sensitivity for archaeological resources, and the potential to inadvertently discover previously unrecorded tribal cultural resources during project construction activities exists. Therefore, Mitigation Measure CUL-1 would be implemented to retain a qualified archaeologist and monitor specific project activities. With implementation of Mitigation Measure CUL-1, the proposed project would not have the potential to eliminate important examples of the major periods of California history or prehistory.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means 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.)?

Less than Significant Impact with Mitigation Incorporated. A significant environmental impact could result from the combined effects of two or more projects that are closely related geographically (i.e., within the same vicinity or greater region, depending on the nature and scope of the project and environmental factor under consideration) and in time (i.e., recently completed projects, projects currently under construction, and/or projects anticipated to be implemented in the near-term future). In general, the effects of a proposed project when combined with the effects of past projects (other than recently completed projects) are accounted for in the baseline conditions under CEQA for the analysis of the proposed project's environmental impacts.

The analysis of the combined impacts of more than one project allows decision makers to consider the potential consequences of a project in a broader environmental context rather than in isolation. This is necessary because a significant combined impact could result even when the individual impacts of related projects are less than significant. The combined effects of several related projects with individual impacts that are less than significant may also be determined to be less than significant on a cumulative basis. In addition, even if the combined effects of several related projects are determined to be significant, an individual project's incremental contribution to those significant combined effects may be determined to be less than cumulatively considerable and therefore less than significant. Specific environmental factors addressed throughout this IS/MND are discussed below with respect to cumulative impacts.

As shown in the environmental analysis in this IS/MND, the proposed project was determined to have no impact related to agriculture and forestry resources, land use and planning, mineral resources, population and housing, public services, recreation, and wildfire. Because the project would have no impact in relation to these factors, it would not have the potential to contribute to a significant effect created by the combined impacts of closely related projects.

Impacts for all other environmental factors considered in this IS/MND were determined to be less than significant either with or without the need for mitigation measures. Impacts that would require mitigation include those related to biological resources; cultural resources; and geology and soils related to paleontological resources.

Impacts to aesthetic resources were determined to be less than significant. These impacts would be isolated to the immediate area of the proposed project, and there are no known other related projects in the immediate area that would combine with the proposed project to create a cumulative impact. Therefore, the proposed project would not result in a cumulatively considerable contribution to aesthetics.

Air pollutant emissions, as assessed under CEQA, are inherently recognized as a cumulative impact. Project-level thresholds of significance for pollutant emissions are used in the determination of whether a project's individual emissions would make a cumulatively considerable contribution to a significant impact. The proposed project construction activities would generate air pollutant emissions below SJVAPCD significance thresholds. Therefore, construction of the proposed project would not result in a cumulatively considerable net increase of criteria pollutants. Additionally, construction of the proposed project would be required to comply with various SJVAPCD regulations, including the preparation and implementation of a dust control plan, which would minimize exposure to sensitive receptors to substantial pollutant concentrations. Related projects would also be required to comply with SJVAPCD regulations and develop project-specific plans, BMPs, and mitigation measures, as necessary, to reduce exposure to sensitive receptors. Any odors or other emissions released by the project construction would be localized and temporary. Because the proposed project is a solar energy system, it would not introduce a new substantial stationary source of air pollutant emissions to the area during operation. Therefore, the proposed project would not result in a cumulatively considerable contribution to a wider adverse air quality impact.

Impacts to biological resources were determined to be less than significant with mitigation. The proposed project has the potential to impact nesting birds, SJKF, burrowing owl, Bakersfield legless lizard, ~~and~~ San Joaquin coachwhip, and Crotch's bumble bee during construction. Mitigation Measure BIO-1, which would require pre-construction nesting bird surveys, would be implemented to reduce potential impacts to nesting birds to a less than significant level. Mitigation Measure BIO-2, which would require biological monitoring of construction activities for special-status species through daily pre-activity clearance surveys and provide the ability to halt work if an unanticipated special-status species is detected on-site, would reduce impacts to special-status species to a less than significant level. Mitigation Measure BIO-3 would require non-breeding season surveys and a pre-construction survey specifically for burrowing owl and coordination with CDFW if a burrowing owl is detected on-site to reduce impacts to burrowing owl to a less than significant level. Mitigation Measure BIO-4 includes a series of measures to avoid impacts to SJKF~~, which reflect the Incidental Take Permit that the University is in the process of obtaining for the species. These measures, which include~~ including scheduling, pre-construction survey, den monitoring and buffers if detected, ~~den collapse or sealing,~~ and implementation of BMPs, which would reduce impacts to SJKF to a less than significant level. Mitigation Measure BIO-5 would require preconstruction surveys for nesting Crotch's bumble

bee, avoidance if the species is detected, and acquisition of an Incidental Take Permit if the species cannot be avoided. These impacts would be site-specific in nature and limited to a small area within the campus and would not result in a cumulatively considerable contribution to impacts related to biological resources.

Potential impacts to related to cultural resources were determined to be less than significant with existing regulations and the implementation of Mitigation Measure CUL-1, which would require archaeological monitoring in the case of inadvertent discoveries of archaeological resources. No impacts would occur to historical resources. Impacts related to potential archaeological resources and human remains, should they occur, would be site-specific in nature, and limited to the project construction footprint. Therefore, the proposed project would not result in a cumulatively considerable contribution to impacts related to cultural resources.

Similar to air quality, the use of energy is considered an impact with broader effects based on the potential consumption of limited energy resources. The proposed project would utilize electricity and petroleum-derived transportation fuels during project construction and operation, but the project's energy consumption would not be considered wasteful, inefficient, or unnecessary. During operation, the proposed project would generate onsite renewable energy is estimated to generate approximately 8.3 GWh, or approximately 40 percent of the campus' electricity use annually. Therefore, the proposed project would not result in a cumulatively considerable contribution to impacts related to energy consumption.

Geology impacts related to seismic hazards and hazards created by various soil conditions pertain to the potential impacts from the environment on the proposed project rather than impacts to the environment caused by the project. In this regard, the project would not result in a cumulatively considerable contribution to similar impacts experienced by closely related projects in the area. Geology impacts related to increased potential for erosion, loss of topsoil would also generally be site-specific in nature, but such impacts could also extend off site and result in a larger impact when combined with similar impacts from closely related projects in the area. However, through compliance with the design recommendations provided by the site-specific geotechnical report, existing policies, and regulations (dust control measures and SWPPP), the proposed project would not result in a cumulatively considerable contribution to a more widespread impact potentially created by the combined effects of closely related projects. Additionally, the inadvertent discovery of paleontological resources, if occurring, would be mitigated through implementation of Mitigation Measure GEO-1, which would require stop work procedures and review of the find by an SVP-qualified paleontologist. Therefore, the proposed project would not result in a cumulatively considerable contribution to impacts related to geology and soils.

GHG emissions, as assessed under CEQA, are inherently recognized as a cumulative impact. The combined GHG emissions generated during project construction and operation would result in a net reduction in carbon emissions as the proposed project would generate clean renewable energy during operation. Additionally, the project would be consistent with plans, policies, and regulations adopted for the purpose of reducing the emissions of greenhouse gases. Therefore, the proposed project would not result in a cumulatively considerable contribution to impacts related to GHG emissions.

Regarding hazards and hazardous materials, the proposed project and related projects would be required to comply with local, state, and federal regulations as well as safeguards incorporated into the project to monitor for, limit, and contain accidental releases would minimize the potential for hazardous material release from the facilities. As such, hazardous

materials associated with the project are not anticipated to combine with those used for other development projects in the area to create a cumulatively considerable effect. Therefore, the proposed project would not result in a cumulatively considerable contribution to impacts related to hazards and hazardous materials.

Hydrology and water quality impacts related to an increased potential for runoff, siltation, flooding, pollution discharges, and groundwater encounters would generally be site-specific in nature. Construction activities would be required to comply with the project-specific SWPPP as required by the NPDES Construction General Permit from the SWRCB. During operation, similar to existing conditions, the project site would remain predominantly pervious, with the exception of the areas for the equipment pads, including the pad for the BESS, and posts. The proposed project would be required to convey a plan to restore erosion protection and site hydrology post-construction, as required by the SWPPP, and would drain into the existing storm sewer system located on campus. Therefore, the proposed project would not result in a cumulatively considerable contribution to impacts related to hydrology and water quality.

Impacts related to noise and vibration have the potential to affect a limited area beyond the boundaries of the project site. The assessment of the combined effect of the project and the surrounding existing setting determined a less than significant impact related to noise and vibration. During project construction activities, noise and vibration impacts would be temporary and less than significant. During operation, noise generated from routine maintenance activities would be minor and infrequent, and the noise generated by the BESS would be less than significant. Furthermore, no known major projects that would contribute to a significant combined impact related to noise have been identified in the vicinity of the proposed project. Therefore, the proposed project would not result in a cumulatively considerable contribution to impacts related to noise.

Regarding transportation, a solar energy system project such as the proposed project, is generally assumed under the 2019 CSU Transportation Impact Study Manual not to generate substantial VMT, and therefore, are presumed to have a less than significant impact on VMT. The project would not result in changes to existing traffic patterns or permanent lane closures. Operation of the proposed project would primarily rely on remote operation and would not generate a significant number of new trips. Therefore, the proposed project would not result in a cumulatively considerable contribution to impacts related to transportation.

The potential for the existence of tribal cultural resources at the project site is considered low to moderate based on archival research and the field survey of the project site, but the potential to inadvertently discover previously unrecorded tribal cultural resources during project construction activities exists. Thus, the project would implement Mitigation Measure CUL-1 to retain a qualified archaeologist and monitor specific project activities, which would minimize the potential for unanticipated impacts to tribal cultural resources. Therefore, the proposed project would not result in a cumulatively considerable contribution to impacts related to tribal cultural resources.

Impacts related to utilities and service systems could contribute to a significant impact from the combined effects of more than one project on the limited capacity of services such as water supply, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, and solid waste disposal. The project would install a solar energy system and a BESS within the CSUB campus. The solar energy system would interconnect to an existing substation north of Kroll Way, and the energy produced would serve the campus. Construction and operational activities are not anticipated to use large amounts of water that would require an increased water supply. Additionally, the project would generate a small

volume of solid waste from construction debris, soils, maintenance activities, and vegetation clearing in terms of daily throughput and current remaining capacity of area landfills or recycling centers. Thus, the proposed project would have less than significant impacts related to utilities and service systems. Therefore, the proposed project would not result in a cumulatively considerable contribution to impacts related to utilities and service systems.

Overall, the proposed project would not result in a cumulatively considerable impact when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

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

Less than Significant Impact. Numerous factors discussed in the environmental impact analyses presented throughout Chapter 3 pertain to the quality of the human environment, including aesthetics, air quality, GHG emissions, hazards and hazardous materials, land use and planning, noise, population and housing, public services, utilities and service systems, and wildfire. Based on the analysis contained in the IS/MND, the environmental impacts created by the proposed project in relation to most of these factors would be absent or less than significant. Therefore, the proposed project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly, and impacts would be less than significant.

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