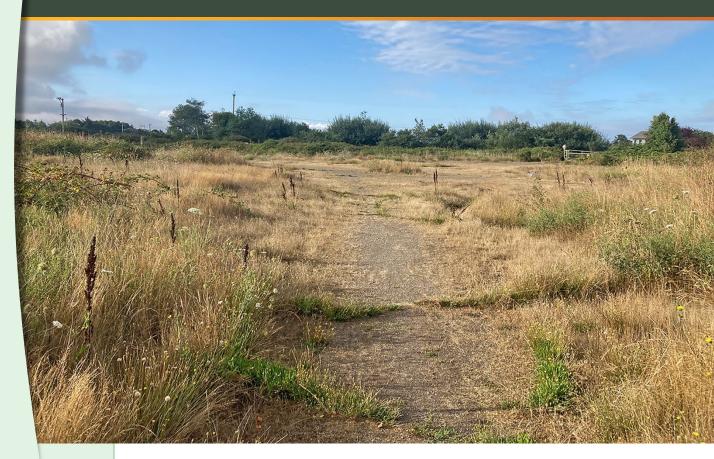
DRAFT INITIAL STUDY/PROPOSED MITIGATED NEGATIVE DECLARATION

Foster Campus Connectivity Project



Prepared for:

Humboldt.

California Polytechnic State University, Humboldt

August 2025

DRAFT INITIAL STUDY/PROPOSED MITIGATED NEGATIVE DECLARATION

Foster Campus Connectivity Project

Prepared for:

Humboldt.

California Polytechnic State University, Humboldt Planning, Design, and Construction Facilities Management 1 Harpst Street Arcata, CA 95521

Contact:

Deirdre N. Clem Project & Space Analyst 707.826.5894

Prepared by:



Ascent Environmental 455 Capitol Mall, Suite 300 Sacramento, CA 95814

Contact:

Chris Mundhenk Principal 310.488.0507

August 2025

19010021.15

TABLE OF CONTENTS

Sect	ion		Page
LIST	OF ABBR	REVIATIONS	iii
1	INTR	ODUCTION	1-1
	1.1	Introduction and Regulatory Guidance	
	1.2	Lead Agency	
	1.3	Purpose of the IS/MND	
	1.4	Summary of Findings	1-2
	1.5	Document Organization	1-2
2	PROJ	IECT DESCRIPTION	2-1
	2.1	Introduction	2-1
	2.2	Project Location	2-1
	2.3	Project Need and Objectives	2-1
	2.4	Project Characteristics	2-5
	2.5	Construction	2-6
	2.6	California State University Autonomy	2-17
	2.7	Anticipated Permits and Approvals	2-17
3	ENVI	RONMENTAL CHECKLIST	3-1
	3.1	Aesthetics	3-4
	3.2	Agriculture and Forest Resources	3-9
	3.3	Air Quality	
	3.4	Biological Resources	3-20
	3.5	Cultural Resources	3-36
	3.6	Energy	3-39
	3.7	Geology and Soils	3-44
	3.8	Greenhouse Gas Emissions	3-50
	3.9	Hazards and Hazardous Materials	3-54
	3.10	Hydrology and Water Quality	3-58
	3.11	Land Use and Planning	3-61
	3.12	Mineral Resources	3-62
	3.13	Noise	3-63
	3.14	Population and Housing	3-72
	3.15	Public Services	3-73
	3.16	Recreation	3-76
	3.17	Transportation	3-77
	3.18	Tribal Cultural Resources	3-81
	3.19	Utilities and Service Systems	3-83
	3.20	Wildfire	3-86
	3.21	Mandatory Findings of Significance	3-88
4	REFE	RENCES	4-1
5	DEDC	DRT PREPARERS	га
ر	KEPU	/I\	ı - ح

Appendices

- A Transportation Analysis
- B Air Quality, Greenhouse Gas Emissions, and Energy Modeling Calculations
- C Cultural Resources Technical Report
- D Noise Modeling Calculations

-1	Øι	ırı	\sim
	21.	" "	
	2-	•••	

Figure 2-1	Project Vicinity	2-2
Figure 2-2	Project Location	2-3
Figure 2-3	Master Plan Proposed Connectivity Aerial	2-4
Figure 2-4	Site Plan	2-7
Figure 2-5a	Existing Master Plan Legend	2-9
Figure 2-5b	Existing Master Plan	2-11
Figure 2-6a	Master Plan Legend-Proposed	2-13
Figure 2-6b	Master Plan - Proposed	2-15
Figure 3.5-1	Historical Campus Energy Demand	3-40
Tables		
Table 2-1	Potential Responsible Agencies, Permits, and Approvals for the Project	2-17
Table 3.2-1	Attainment Status Designations for Humboldt County	3-13
Table 3.2-2	Maximum Daily Construction-Generated Emissions	3-16
Table 3.2-3	Maximum Daily Operations-Generated Emissions	3-17
Table 3.4-1	Special-Status Plant and Wildlife Species with Potential to Occur in the Vicinity of the Project Sit	e3-23
Table 3.6-1	Construction Energy Consumption	3-41
Table 3.6-2	Operational Energy Consumption for Buildout Year (2026)	3-41
Table 3.6-3	Operational Transportation Fuel Consumption	3-41
Table 3.6-4	Comparison of Cal Poly Humboldt Climate Action Plan 2.0 with the Project	3-42
Table 3.8-1	Statewide GHG Emissions by Economic Sector	3-51
Table 3.8-2	Cal Poly Humboldt GHG Emissions by Source (2024)	3-5
Table 3.13-1	Typical Noise Sources	3-65
Table 3.13-2	City of Arcata Noise Standards for New Projects and Retrofits	3-67
Table 3.13-3	City of Arcata Maximum Allowable Transportation Noise Sources Exposure	3-67
Table 3.13-4	Noise Levels from Construction Equipment	3-69
Table 3.13-5	Long-Term Traffic Noise Increases	3-71
Table 3.17-1	Vehicle-Miles Traveled Calculation	3-79
Table 3.19-1	City of Arcata Water Availability (Supply minus Demand) during Normal, Dry, and Multiple-Dry Years	3-84

LIST OF ABBREVIATIONS

°C degrees Celsius

°F degrees Fahrenheit

A&MRTS Arcata & Mad River Transit System

AB Assembly Bill

ADA Americans with Disabilities Act

AFD Arcata Fire District afy acre-feet per year

BAAQMD Bay Area Air Quality Management District

BMP best management practice

CAAQS California Ambient Air Quality Standards

Cal Poly Humboldt California State Polytechnic University at Humboldt

California Emissions Estimator Model
Caltrans
California Department of Transportation
Campus Master Plan
2004 Master Plan for Cal Poly Humboldt

CBC California Building Code

CDFW California Department of Fish and Wildlife
CEQA California Environmental Quality Act
CESA California Endangered Species Act
CNDDB California Natural Diversity Database

CNPS California Native Plant Society

 ${\sf CO}$ carbon monoxide ${\sf CO}_2$ carbon dioxide

CRHR California Register of Historic Resources

CSU California State University

dB decibels

DPS distinct population segment

DTSC California Department of Toxic Substances Control

EIR environmental impact report

EPA US Environmental Protection Agency

ESA federal Endangered Species Act
ESU evolutionarily significant unit

EV electric vehicle

FTE full-time equivalent

GHG greenhouse gas

HBMWD Humboldt Bay Municipal Water District
HMMP habitat mitigation and monitoring plan

IS/MND initial study/proposed mitigated negative declaration

LCI Governor's Office of Land Use and Climate Innovation

L_{eq} equivalent continuous sound level

MTCO₂e metric tons of carbon dioxide equivalent
NAAQS National Ambient Air Quality Standards
NAHC Native American Heritage Commission

NCAB North Coast Air Basin

NCRWQCB North Coast Regional Water Quality Control Board
NCUAQMD North Coast Unified Air Quality Management District

NMFS National Marine Fisheries Service

NO nitric oxide

NO₂ nitrogen dioxide

NOA naturally occurring asbestos

NO_X oxides of nitrogen

NPDES National Pollutant Discharge Elimination System

NRHP National Register of Historic Places
PG&E Pacific Gas and Electric Company

PM₁₀ respirable particulate matter (particulate matter with an aerodynamic resistance

diameter of 10 micrometers or less)

PM_{2.5} fine particulate matter (particulate matter with an aerodynamic resistance

diameter of 2.5 micrometers or less)

PPV peak particle velocity

RCP Representative Concentration Pathway

ROG reactive organic gas

SB Senate Bill SO_2 sulfur dioxide

SPL sound pressure level

SWPPP stormwater pollution prevention plan
SWRCB State Water Resources Control Board

TAC toxic air contaminant
TCR tribal cultural resource

TISM Transportation Impact Study Manual

UBC Uniform Building Code

UPD University Police Department
USFWS US Fish and Wildlife Service

UWMP 2020 Urban Water Management Plan

VdB vibration decibels
VMT vehicle miles traveled

1 INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the California State Polytechnic University, Humboldt (Cal Poly Humboldt) to evaluate potential environmental effects resulting from development and operation of a parking lot (the Foster Campus Connectivity Project or project) at 2000 Foster Avenue (Assessor's Parcel Number 505-161-011). Section 2, "Project Description", presents the detailed project information.

This document has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). An initial study is prepared by a lead agency to determine if a project may have a significant effect on the environment (State CEQA Guidelines Section 15063[a]), and thus to determine the appropriate environmental document. In accordance with State CEQA Guidelines Section 15070, a "public agency shall prepare...a proposed negative declaration or mitigated negative declaration...when: (a) The Initial Study shows that there is no substantial evidence...that the project may have a significant impact on the environment, or (b) The Initial Study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions would reduce potentially significant effects to a less than significant level." In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the project would not have a significant effect on the environment and, therefore, does not require the preparation of an environmental impact report (EIR). By contrast, an EIR is required when the project may have a significant environmental impact that cannot clearly be reduced to a less than significant effect by adoption of mitigation or by revisions in the project design.

As described in the environmental checklist (Chapter 3), the project would not result in any unmitigated significant environmental impacts. Therefore, an IS/MND is the appropriate document for compliance with the requirements of CEQA. This IS/MND conforms to these requirements and to the content requirements of State CEQA Guidelines Section 15071.

1.2 LEAD AGENCY

Under CEQA, the lead agency is the public agency with primary responsibility over approval of the project. The California State University (CSU) Board of Trustees is the CEQA lead agency because it is responsible for discretionary approval of the project.

1.3 PURPOSE OF THE IS/MND

The purpose of this document is to present to decision-makers and the public information about the environmental consequences of implementing the project. This disclosure document is being made available to the public for review and comment. This IS/MND will be available for a 30-day public review period from August 8, 2025 to September 8, 2025.

The IS/MND is available for review at: https://www.humboldt.edu/facilities-management/xpk114-foster-campus-connectivity-project

Supporting documentation referenced in this document is available upon request from Cal Poly Humboldt. Requests and comments should be addressed to:

Deirdre Clem
Facilities Management
California State Polytechnic University, Humboldt
1 Harpst Street
Arcata, CA 95521

Email: <u>Deirdre.Clem@humboldt.edu</u>

If you wish to submit written comments (including via e-mail), they must be postmarked by September 8, 2025. After comments are received from the public and reviewing agencies, the Board of Trustees may (1) adopt the MND and approve the project; (2) undertake additional environmental studies; or (3) abandon the project. If the project is approved and funded, Cal Poly Humboldt may proceed with the project.

1.4 SUMMARY OF FINDINGS

Chapter 3 of this document contains the analysis and discussion of potential environmental impacts of the project.

Based on the issues evaluated in that chapter, it was determined that the project would have either no impact or a less than significant impact related to most of the issue areas identified in the Environmental Checklist, included as Appendix G of the State CEQA Guidelines. These include the following issue areas:

- air quality
- agriculture and forest resources,
- energy,
- ▶ geology/soils,
- greenhouse gas emissions and climate change,
- hazards and hazardous materials,
- hydrology and water quality,
- land use/planning,

- mineral resources,
- population/housing,
- public services,
- recreation,
- ▶ transportation,
- utilities/service systems, and
- wildfire.

Potentially significant impacts were identified for aesthetics, biological resources, cultural resources, noise, and tribal cultural resources; however, mitigation measures included in the IS/MND would reduce all impacts to a less than significant level.

1.5 DOCUMENT ORGANIZATION

This IS/MND is organized as follows:

- ▶ Chapter 1: Introduction. This chapter provides an introduction to the environmental review process. It describes the purpose and organization of this document as well as presents a summary of findings.
- ► Chapter 2: Project Description and Background. This chapter describes the purpose of and need for the proposed project, identifies project objectives, and provides a detailed description of the project.
- ► Chapter 3: Environmental Checklist. This chapter presents an analysis of a range of environmental issues identified in the CEQA Environmental Checklist and determines if project actions would result in no impact, a less than significant impact, a less than significant impact, a less than significant impact. If any impacts were determined to be potentially significant, an EIR would be required. For this project, however, none of the impacts were determined to be significant after implementation of mitigation measures.
- ▶ Chapter 4: References. This chapter lists the references used in preparation of this IS/MND.
- ▶ Chapter 5: List of Preparers. This chapter identifies report preparers.

2 PROJECT DESCRIPTION

2.1 INTRODUCTION

The California State Polytechnic University at Humboldt (Cal Poly Humboldt) proposes to develop and operate a parking lot and shuttle station (the project) at 2000 Foster Avenue (Assessor's Parcel Number 505-161-011). The project site is owned by the Board of Trustees of the California State University (CSU). The project would be developed in a single phase and would result in paving of the project site to support long-term student parking, improved access to the project site, provision of shuttle stops within the parking lot and at the intersection of 17th and Q Street, landscaping, lighting, and bioretention facilities to support on-site stormwater management. In addition, the project involves modification of the Humboldt State University 2004 Master Plan (Campus Master Plan) to remove the approved Parking Structure P from the main campus and include the project site as part of the Campus Master Plan.

2.2 PROJECT LOCATION

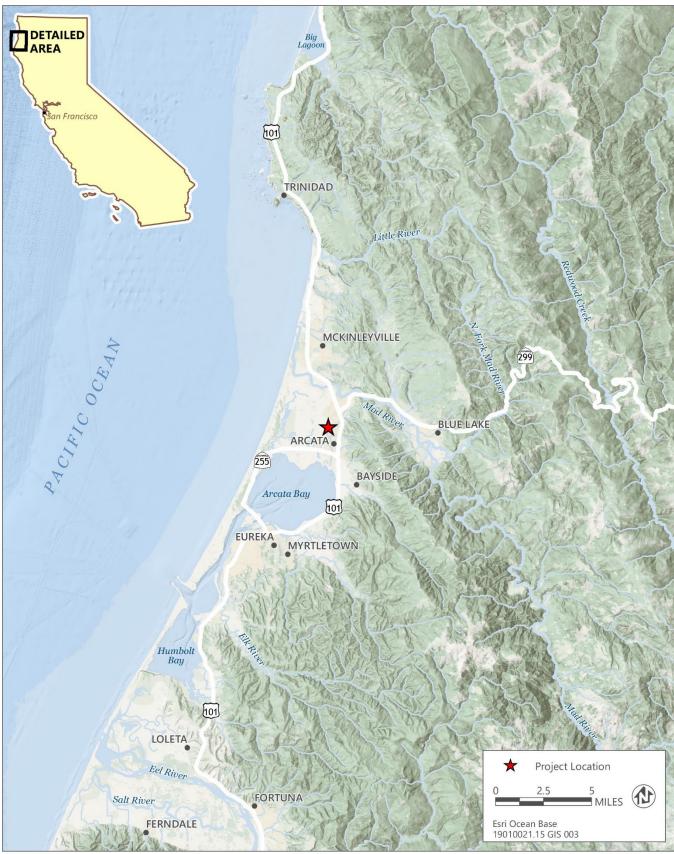
The 16.7-acre project site is located at 2000 Foster Avenue within the City of Arcata (Figure 2-1), approximately 0.75-mile northwest of the main campus and 0.50 mile west of US Highway 101. There are no pedestrian or dedicated bike facilities along Foster Avenue near the project site, with the exception of an unpaved pathway along the existing and disused Arcata Spur of Humboldt Northern Railway railroad right-of way that is located along the southern portion of the project site adjacent to Foster Avenue.

The project site is currently undeveloped, consisting primarily of nonnative/ornamental shrubs and ruderal vegetation, with some barren and graveled areas, as well as concrete pad remnants of a former lumber mill. The original native topsoil was removed and replaced with fill materials, which were placed across most of the project site. The fill materials, consisting of imported river-run gravels mixed with silt, sand, and crushed rock, range in depth between one and five feet. Beneath the gravel, much of the subsurface infrastructure associated with the former mill that occupied the site remains intact. Some old concrete floors and slabs are visible at the surface, and a buried culvert was encountered in a test pit evaluated as part of the geotechnical study (SHN 2024).

The eastern boundary of the project site is formed by McDaniel Slough and an associated riparian corridor, and shallow drainage ditches line Foster Avenue along the southern boundary of the project site. The project site is bordered by residential uses to the north and east, rural residential and agricultural uses to the west and to the south of Foster Avenue, and fallow agricultural land to the west (Figure 2-2). Foster Avenue runs along the southern boundary of the project site and provides the only access to the site. Within the overall project site, approximately 4 acres would be developed along Foster Avenue, as depicted in Figure 2-3.

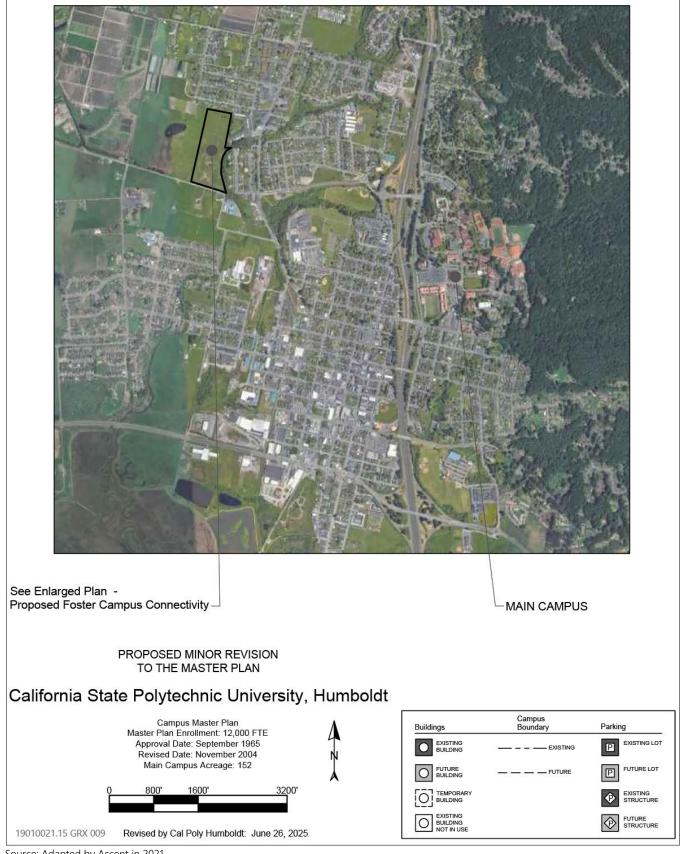
2.3 PROJECT NEED AND OBJECTIVES

Based on the "Parking Market Demand Study" prepared by Walker Consultants in 2018 (Walker Study), peak occupancy of parking spaces on the main campus is close to 100 percent. The study's conclusions suggest the campus parking supply is saturated and latent demand exists. Consequently, it is assumed that the 212 parking spaces proposed on the Foster Avenue property would be fully occupied, once constructed. Due to the pending construction of various approved projects, 37 existing parking stalls will be removed to allow for development of these approved projects. In addition, the Campus Master Plan identifies a future parking structure, which would provide up to 1,000 parking spaces, east of Union Street and north of 17th Street. However, this parking structure would be located on land that is not currently controlled by Cal Poly Humboldt and, as such, is not considered reasonably foreseeable (Fehr & Peers 2025). While current campus enrollment is 5,525 full-time equivalent (FTE) students as of 2024, the current Campus Master Plan projected up to 12,500 FTE students and determined parking demand based on the envisioned FTE count (CSU Humboldt 2004, CSU 2025).



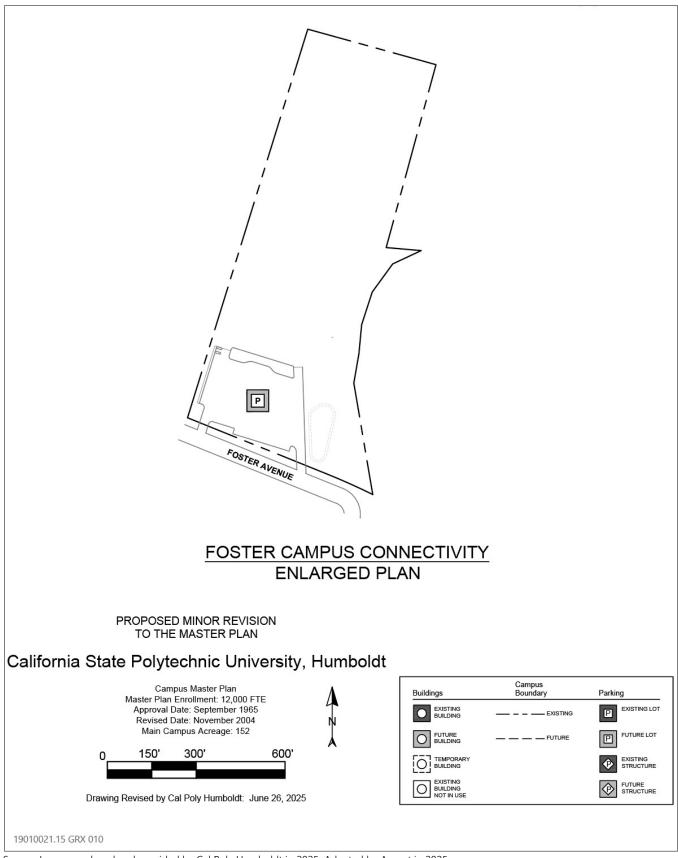
Source: Adapted by Ascent in 2021.

Figure 2-1 Project Vicinity



Source: Adapted by Ascent in 2021.

Figure 2-2 **Project Location**



Source: Image produced and provided by Cal Poly Humboldt in 2025; Adapted by Ascent in 2025.

Figure 2-3 Master Plan Proposed Connectivity Aerial

The project seeks to contribute to the creation of an adequate parking supply for that enrollment through the creation of additional parking resources within the approved total per the 2004 Campus Master Plan as adopted in 2004. For the purposes of this IS/MND, the project objectives are as follows:

- provide additional parking for students on University-owned property proximate to the Cal Poly Humboldt main campus,
- reduce on-street parking demand within the City of Arcata,
- > provide visual screening and setbacks from nearby residential uses, and
- ▶ provide a secure facility accessible to students with shuttle service to the campus.

2.4 PROJECT CHARACTERISTICS

2.4.1 Parking Lot

The project would consist of the construction and operation of a paved student parking lot with 212 parking spaces along Foster Avenue, as depicted in Figure 2-4, within the southernmost 4 acres of the 16.7-acre project site. In addition, a shuttle station with two bicycle shelters, two areas with outdoor bike racks, and a bus shelter would be provided along the northern edge of the parking lot. Planters and light standards would be installed at the corners and northern extent of the shuttle station. Appropriate signage and marked walkways within the parking lot would be provided directing students to the shuttle station and bike parking. Of the 212 parking stall total, 7 would be accessible parking spaces that meet Americans with Disabilities Act (ADA) requirements. The accessible parking spaces would be located at the northwestern corner of the parking area for ease of access to the shuttle station.

Campus shuttle service would be extended to the project site and transport students between the parking lot and campus Monday through Friday from 7 a.m. to 6 p.m. every 15 minutes. An additional shuttle stop (i.e., limited to a streetside sign indicating the shuttle stop) and wayfinding signage is proposed as part of the project near the intersection of Q Street and 17th Street. Shuttle services would not be offered after 6 p.m. on weekdays. During the weekends, Saturday through Sunday, shuttle service would be dependent on campus events and would not offer regular service.

Shuttle Station

The shuttle station, as noted above, would include two bicycle shelters, two areas for outdoor bike racks, and a bus shelter. Each bicycle shelter would be approximately 20 ft wide by 40 ft long and up to 12 ft in height, allowing for long-term, weather-protected storage of approximately 45 bicycles. In addition, outdoor bicycle parking is intended for short-term bicycle parking would allow for approximately 60 additional bicycles to be stored. Total on-site bicycle storage would allow for approximately 150 bicycles to be parked at the shuttle station.

The on-site bus shelter would be located within the center of the shuttle station and would be approximately 10 wide by 16 ft long and up to 12 ft in height. The exterior of the structure would consist of a solid wall of clear tempered safety glass on three sides with the southern-facing wall open on either end to allow for ingress/egress of students awaiting a campus shuttle. Animal-proof trash receptables would be installed at the shuttle station.

Access and Safety

To provide access to the parking lot, the two existing driveways to the site along Foster Avenue would be widened, realigned to support improved movement, and paved. Each driveway would provide two-way travel with one lane in each direction to allow for safe passage of vehicles entering and exiting the site. In addition, speed humps would be provided at each entrance and throughout the parking lot drive aisles to limit the speed of vehicular travel through the site.

The project would include new lighting within the parking area to support safe access. Light fixtures would be fitted with light-emitting diode (LED) lamps with lighting controls and would be shielded and deliberately located to reduce potential spillover light onto adjacent properties. Further, on-site lighting standards would be set back a minimum of

50 feet from Foster Avenue and the eastern and western boundaries of the project site. No high-mast lighting fixtures (i.e., poles greater than 25 feet tall) would be installed within or near the project site. The lighting standards would be consistent with those currently located along Heather Lane and at the Westwood Garden Apartments complex.

Landscaping

The site would be landscaped with trees along the western edge of the site (e.g., shore pine, silk tassel, wax myrtle) and southern edge of the site (red cedar). Areas between the parking spaces and McDaniel Slough, including the bioretention basin, would be hydroseeded with native perennials, forbs, and grasses.

Drainage

As shown in Figure 2-4, a bioretention basin (approximately 7,000 square feet [sf] in size) would be constructed east of the proposed parking lot. The site would be sloped to drain to the bioretention basin through a series of storm drain pipes distributed throughout the parking lot. In accordance with the main campus municipal separate storm sewer system permit, the basin would be designed to retain stormwater flows and allow collected stormwater to percolate back into the soil. The bioretention basin would also include an outfall that would provide emergency drainage to McDaniel Slough in the event that stormwater flows exceeded the percolation rate/capacity of the basin. Vegetation within the basin would be maintained by University Grounds Shop staff.

Utilities

With respect to utility service, water and electricity connections would be made to existing infrastructure located along Foster Avenue to provide water for landscaping and power for on-site lighting. A water line would be extended from an existing City main located in Foster Avenue to the shuttle station. Water would be used for hand-watering of landscaped areas, but would not supply domestic uses such as water fountains. Extension of power would be accommodated by tying into the existing power lines and would not require additional off-site improvements such as a new substation or upgraded power lines.

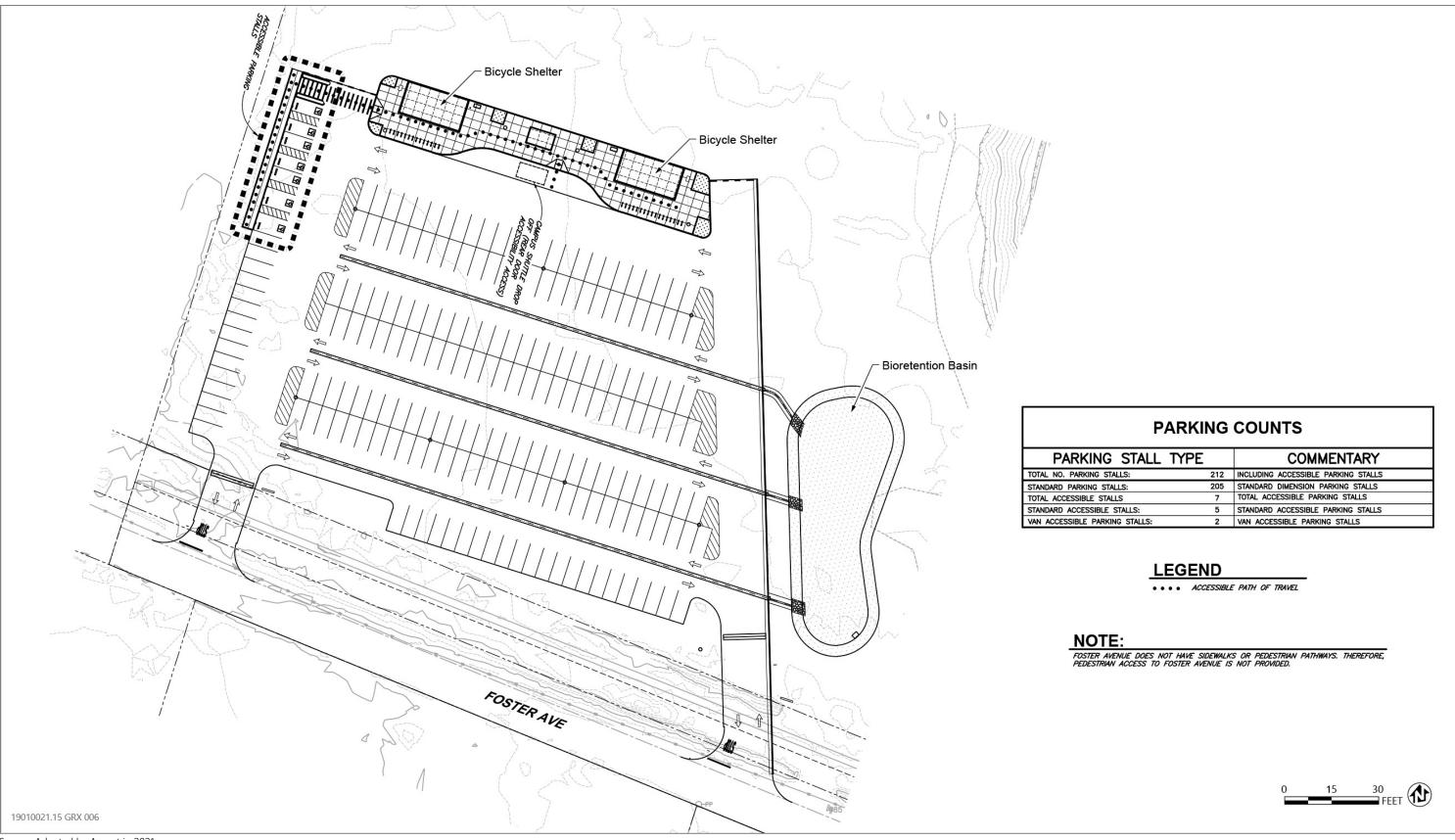
2.4.2 Campus Master Plan Modifications

The project includes a minor revision to the Campus Master Plan to remove Parking Structure P/East Parking Structure (i.e., Future Structure 25 as depicted in the approved Campus Master Plan) and more accurately reflect current plans/conditions at the Cal Poly Humboldt campus. Parking Structure P/Future Structure 25 is located northeast of the intersection of 17th Street and Union Street in an area outside of the current campus boundary (Figures 2-5a and 2-5b). This Parking Structure was conceptually approved as part of the Campus Master Plan to support 1,000 parking spaces, but the property was not acquired by the University. The proposed modifications to the Campus Master Plan are shown in Figures 2-6a and 2-6b.

2.5 CONSTRUCTION

Construction would occur in one phase over a period of approximately 6 months (120 business days) between Fall 2025 and early Spring 2026 and would be confined to the southernmost third of the project site within which the parking lot and bioretention basin would be developed. The remainder of the project site would not be disturbed during construction. After initial equipment mobilization, site clearing would begin followed by excavation of bioswales, which would run between the parking aisles to collect and convey stormwater to the bioretention basin. Excavation within the majority of the parking lot area would be limited to a depth of 6 inches or less.

Following site clearing and initial excavation, the existing culverts at the project site that are located beneath the ingress and egress points to the proposed parking area would be removed and replaced. Once these features have been improved, the parking area would be graded, and the driveways would be constructed. The entire parking and shuttle station area would be underlain with geogrid fabric beneath aggregate base. Areas associated with the shuttle station would be developed with concrete, and parking areas would be paved with asphalt. After the project site has been paved, landscaping and stripping would be completed.



Source: Adapted by Ascent in 2021.

Figure 2-4 Site Plan

California State Polytechnic University, Humboldt

Master Plan Enrollment: 12,000 FTE

Master Plan approved by the Board of Trustees: September 1965

Master Plan Revision approved by the Board of Trustees: January 1967, January 1977, July 1977,

November 1977, May 1978, March 1981, May 1990, November 2004, January 2023

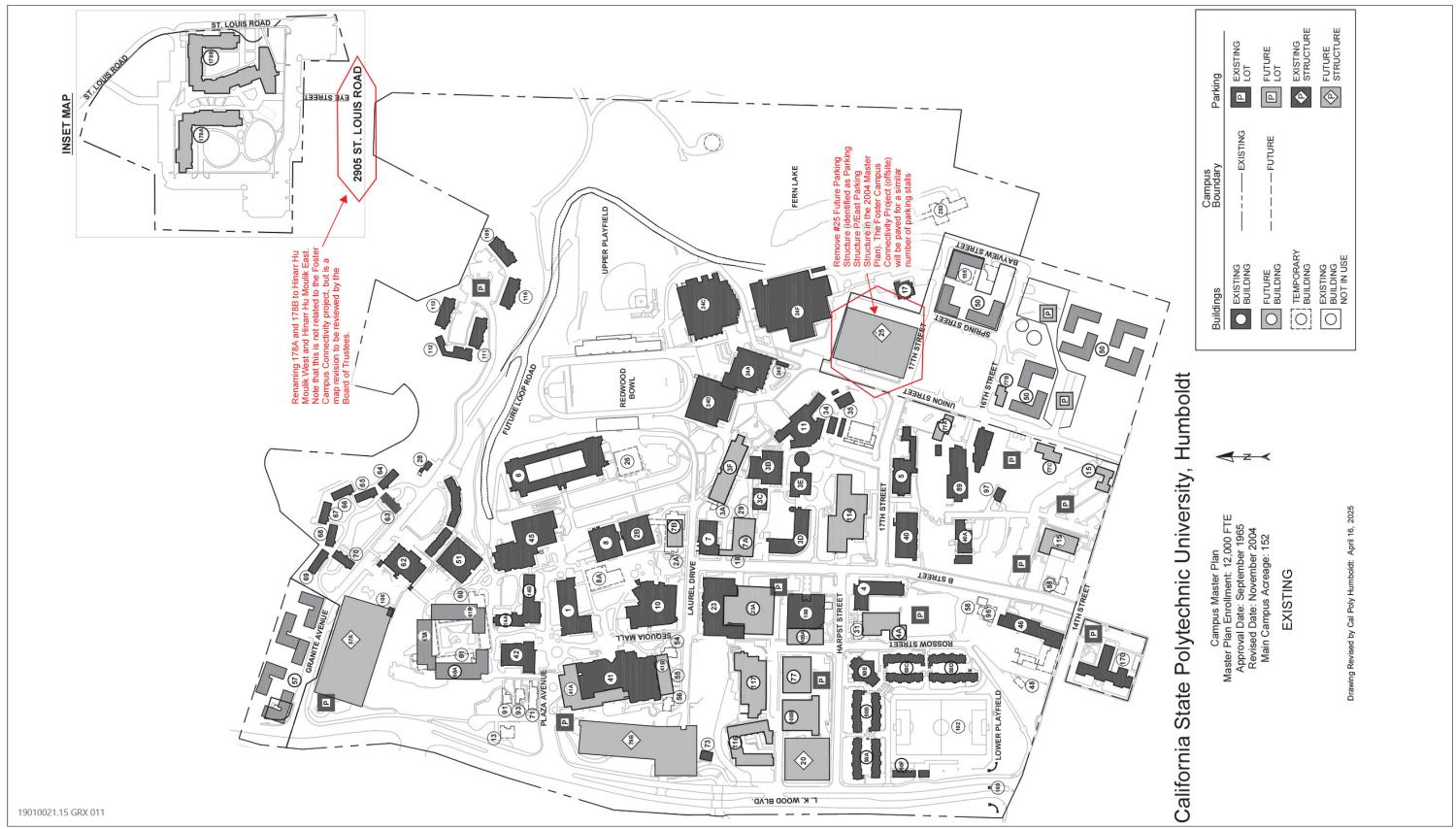
929		1.31	10 100			
1.		41A.	Library Addition		89.	Behavioral and Social Sciences
	Art A	41B.				Hagopian House
	Art B	42.	Student Health Center	01		Brero House
	Science A	45.	Gutswurrak Student Activity	Ctr	96.	11 5
	Science B	46.	Facilities Management		97.	
	Science C	48.	Hazardous Waste Handling			Upper Playing Field
	Alistair McCrone Hall		Facility		100.	
	Dennis K. Walker Greenhouse	50.	Student Housing		100A.	_
	Harry Griffith Hall	50A-D.	College Creek Apartments		100B.	3
	Classroom Building	50E.	,			College Creek Field
	Forestry	505	Center		105.	•
	Founders Hall	50F.	9		108.	Housing Cogeneration Unit
7.	Jenkins Hall		Locker Room		109.	
7A.		51.	Cypress Residence Hall		110.	
70	Renovation and Addition	54.	Telonicher House		111.	
/B.	Jenkins Hall – Visual Art	55.	Balabanis House			Creekview - Creekside Lounge
	Renovation and Addition		Hadley House			Creekview - Juniper Hall
	Music A	57.	Granite Student Housing			Engineering and Technology
	Music B	57A.	North Campus Parking		115.	Energy Research &
	Theatre Arts		Structure		440	Sustainability Center
	Wildlife and Fisheries	58.	Switchgear Building		116.	
	Feuerwerker House	60.	Redwood Residence Hall		4.47	(Housing, Dining and Health)
	Nelson Hall West	60A.	Sunset Residence Hall		117.	Dining and Health
	Nelson Hall East	0.4	Replacement		4.40	(Housing, Dining and Health)
	Figueiredo Building	61.			149.	Wireless Communication
	Marine Wildlife Care Center	61A.	Redwood Residence Hall		400	Facility
	Brookins House	045	Replacement		160.	
20.	,	61B.	Redwood Residence Hall		170.	, , , , , , , , , , , , , , , , , , , ,
23.	Gist Hall		Replacement		175.	
23A.		62.	Jolly Giant Commons		178A.	
244	Replacement and Addition	63.	Pepperwood Residence Hal		470D	Housing I*
24A.		64.	Tan Oak Residence Hall		178B.	2905 St. Louis Rd Student
24C.		65.	Maple Residence Hall		202	Housing II*
24D.	Recreation & Wellness	66.	Madrone Residence Hall		203.	Redwood Sciences Lab
245	Center	67.	Hemlock Residence Hall		1505	ND.
24E.	9	68.	Chinquapin Residence Hall		LEGE	
	Kinesiology and Athletics	69. 70	Alder Residence Hall			ng Facility / <i>Proposed</i> ty *off campus
25.	East Campus Parking	70.	Cedar Residence Hall		raciiii	y on campus
26	Structure	71.	Little Apartments		NOTE	Eviating building numbers
26.	Van Matre Hall	73. 77.	Wagner House			Existing building numbers
27.	Telonicher Marine	77A.	Student Center South			spond with building numbers Space and Facilities Data
20	Laboratory*	77A. 77B.	Student Activities Student Activities			
	Housing Operations Building	77C.			Dase	(SFDB)
31.	Experimental Greenhouse Swetman	77C.	West Campus Parking			
	Wildlife Game Pens	190.	Structure			
	Fish Hatchery	88.	Marketing and Communicat	ione		
	Natural Resources	00.	Marketing and Communicat	10115		
40. 40A.	Schatz Energy Research					500 500 600 500 500 100 W
40A.	Center					ated to the Foster Campus Connectivity
41	Library		project	i, but is a	а тпар теч	ision to be reviewed by the Board of Trustees.
41.	Library					

Source: Image produced and provided by Cal Poly Humboldt in 2025; adapted by Ascent in 2025.

Figure 2-5a Existing Master Plan Legend

19010021.15 GRX 012

This page is intentionally left blank.



Source: Image produced and provided by Cal Poly Humboldt in 2025; adapted by Ascent in 2025.

Figure 2-5b Existing Master Plan

California State Polytechnic University, Humboldt

Master Plan Enrollment: 12,000 FTE

Master Plan approved by the Board of Trustees: September 1965

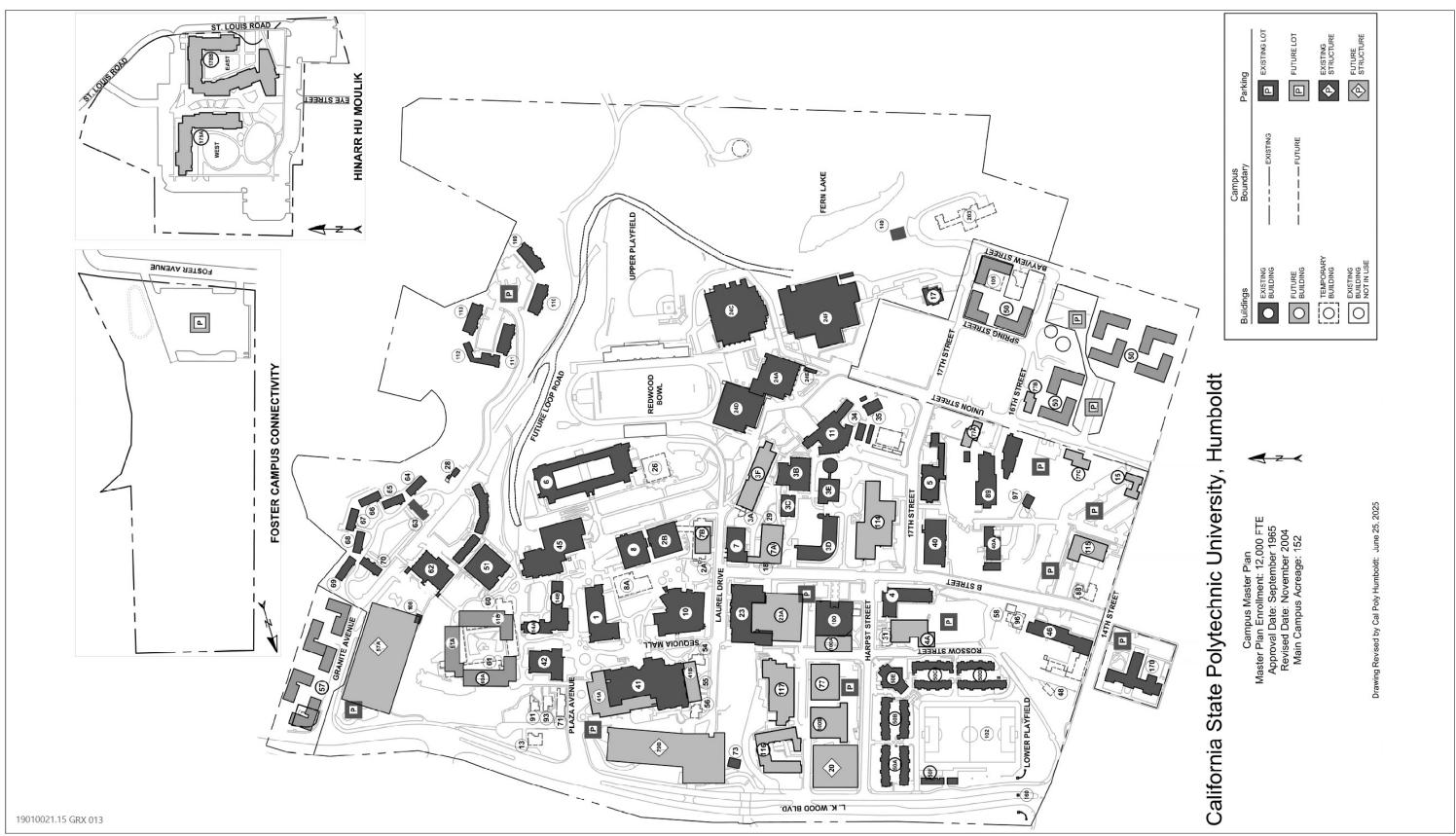
Master Plan Revision approved by the Board of Trustees: January 1967, January 1977, July 1977, November 1977, May 1978, March 1981, May 1990, November 2004, January 2023

		0:		A 1 111	-00	5.1
	1.	Siemens Hall		Library Addition	89.	Behavioral and Social Sciences
		Art A		Library Addition	91.	5 1
		Art B	42.	Student Health Center	93.	
	3A.	Science A	45.	Gutswurrak Student Activity Ctr	96.	Shipping and Receiving
	3B.	Science B	46.	Facilities Management	97.	
		Science C	48.	Hazardous Waste Handling	98.	11 , 3
	3D.	Alistair McCrone Hall	240000	Facility	100.	Student and Business Services
	3E.	Dennis K. Walker Greenhouse	50.	Student Housing	100A.	Classroom Building
	4.	Harry Griffith Hall	50A-D.	College Creek Apartments	100B.	Classroom Building
	4A.	Classroom Building	50E.	College Creek Community	102.	
	5.	Forestry		Center	105.	Boat Facility
	6.	Founders Hall	50F.	College Creek Field	108.	Housing Cogeneration Unit
	7.	Jenkins Hall		Locker Room	109.	Creekview - Fern Hall
	7A.	Jenkins Hall – Visual Art	51.	Cypress Residence Hall	110.	
		Renovation and Addition	54.	Telonicher House	111.	
	7B.	Jenkins Hall – Visual Art	55.	Balabanis House	112.	Creekview - Creekside Lounge
		Renovation and Addition	56.	Hadley House	113.	Creekview - Juniper Hall
	8A.	Music A	57.	Granite Student Housing	114.	Engineering and Technology
	8B.	Music B	57A.	North Campus Parking	115.	Energy Research &
	10.	Theatre Arts		Structure		Sustainability Center
	11.	Wildlife and Fisheries	58.	Switchgear Building	116.	Housing
	13.	Feuerwerker House	60.	Redwood Residence Hall		(Housing, Dining and Health)
	14A.	Nelson Hall West	60A.	Sunset Residence Hall	117.	Dining and Health
	14B.	Nelson Hall East		Replacement		(Housing, Dining and Health)
	15.	Figueiredo Building	61.	Sunset Residence Hall	149.	Wireless Communication
	17.	Marine Wildlife Care Center	61A.	Redwood Residence Hall		Facility
	18.	Brookins House		Replacement	160.	Campus Entrance Gate
	20.	South Campus Parking Structure	61B.	Redwood Residence Hall	170.	Trinity Early Learning Center
	23.	Gist Hall		Replacement	175.	Corporation Yard
	23A.	Gist Hall – Theatre Arts	62.	Jolly Giant Commons	178A.	Hinarr Hu Moulik West Residence
		Replacement and Addition	63.	Pepperwood Residence Hall		Hall
	24A.	Forbes Gymnasium	64.	Tan Oak Residence Hall	178B.	Hinarr Hu Moulik East Residence
ı	24C.	Student Recreation Center	65.	Maple Residence Hall		Hall
	24D.	Recreation & Wellness	66.	Madrone Residence Hall	203.	Redwood Sciences Lab
		Center	67.	Hemlock Residence Hall		
	24E.	Cogeneration Unit	68.	Chinquapin Residence Hall	LEGE	END:
	24F.	Kinesiology and Athletics	69.	Alder Residence Hall	Existi	ng Facility / Proposed
	26.	Van Matre Hall	70.	Cedar Residence Hall	Facili	ty *off campus
	27.	Telonicher Marine	71.	Little Apartments		
		Laboratory*	73.	Wagner House	NOTE	E: Existing building numbers
	28.	Housing Operations Building	77.	Student Center South	corre	spond with building numbers
	29.	Experimental Greenhouse	77A.	Student Activities		Space and Facilities Data
		Swetman	77B.	Student Activities		(SFDB)
	34.	Wildlife Game Pens	77C.			
	35.	Fish Hatchery	79B.			
	40.			Structure		
	40A.	Schatz Energy Research	88.	Marketing and Communications		
		Center		_		
	41.	Library				
)21.15 GRX 014				
L						

Source: Image produced and provided by Cal Poly Humboldt in 2025; adapted by Ascent in 2025.

Figure 2-6a Master Plan Legend-Proposed

This page is intentionally left blank.



Source: Image produced and provided by Cal Poly Humboldt in 2025; adapted by Ascent in 2025.

Figure 2-6b Master Plan - Proposed

Construction of the bioretention basin would include excavation of the basin footprint, installation of engineered media (e.g., gravel, sand, etc.), and revegetation with a native seedmix.

Prior to initiation of construction, temporary fencing would be installed around the active construction area and other security measures such as cameras and directional lighting would be installed to prevent unauthorized access and promote site safety. Construction staging would be confined on-site and would avoid the riparian corridor along the eastern edge of the site and the drainage ditches along the southern boundary of the site. Additionally, because the project would disturb more than 1 acre of land, the project would be required to obtain coverage under the State Water Resources Control Board Construction General Permit, which requires development of a stormwater pollution prevention plan (SWPPP). During project construction activities, SWPPP best management practices (e.g., erosion control, site stabilization, etc.) would be implemented at the site to prevent construction-related silt or debris from affecting areas outside the site boundary.

Although CSU (as a state entity) is not subject to local plans, policies, and regulations, construction hours would occur in a manner consistent with the City of Arcata General Plan Policy N-5d (City of Arcata 2019). Construction would generally occur Monday through Friday between the hours of 8:00 a.m. and 7:00 p.m. No construction would occur on weekends or holidays.

2.6 CALIFORNIA STATE UNIVERSITY AUTONOMY

Cal Poly Humboldt is an entity of the CSU system, which is a statutorily- and legislatively created, constitutionally authorized entity of the State of California and is therefore not subject to local government planning and land use plans, policies, or regulations. Although there is no formal mechanism for joint planning or the exchange of ideas, Cal Poly Humboldt may consider, for coordination purposes, aspects of local plans and policies for the communities surrounding the campus when it is appropriate. The proposed project would be subject to state and federal agency planning documents described herein but would not be bound by local or regional planning regulations or documents such as the City's or County's General Plan or municipal code.

Cal Poly Humboldt seeks to maintain an ongoing exchange of ideas and information and to pursue mutually acceptable solutions for issues that confront both the campus and its surrounding community. To foster this process, Cal Poly Humboldt participates in, and communicates with, City of Arcata (City), Humboldt County (County) and community organizations and sponsors various meetings and briefings to keep local organizations, associations, and elected representatives apprised of ongoing planning effort and consider community input.

2.7 ANTICIPATED PERMITS AND APPROVALS

The CSU Board of Trustees is the lead agency for this IS/MND and has sole authority to consider and approve the project and adopt the MND. Table 2-1 lists agencies that may be required to issue permits or approve certain aspects of the project. This IS/MND is expected to be used to satisfy CEQA requirements of the listed responsible and/or trustee agencies.

Table 2-1 Potential Responsible Agencies, Permits, and Approvals for the Project

Agency	Permit/Approval			
Lead Agency				
California State University, Board of Trustees	 Adopt the MND Approve the project Approval of Master Plan map revision to add project site and project and remove parking structure 25 from the main campus 			

Agency	Permit/Approval				
Other Agencies					
California Division of State Architect	► Review for accessibility compliance				
California Department of Fish and Wildlife	► Lake and Streambed Alteration Agreement (LSAA) from CDFW pursuant to California Fish and Game Code Section 1602				
U.S. Army Corps of Engineers	► Clean Water Act (CWA) Section 404 Permit for impacts to waters of the United States from bioretention outfall and filling of the wetlands located along the southern edge of the project site.				
North Coast Regional Water Quality Control Board	 National Pollutant Discharge Elimination System construction stormwater permit (Notice of Intent to proceed under General Construction Permit) CWA Section 401 Water Quality Certificate for impacts to waters of the United States 				
City of Arcata	 Roadway encroachment permits Installation of new shuttle stop at 17th and Q Streets Utility easements (electrical line, lighting, and water pipeline extension to the project site) 				

3 ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1. Project Title: Foster Campus Connectivity Project

2. Lead Agency Name and Address: California State Polytechnic University at Humboldt

1 Harpst Street Arcata, CA 95521

3. Contact Person and Phone Number Deirdre Clem, Project and Space Analyst

(707) 826-5894

4. Project Location: The proposed project is located at 2000 Foster Avenue within

the City of Arcata (herein referred to as "project site").

5. Project Sponsor's Name and Address: California State Polytechnic University at Humboldt

Planning, Design, and Construction

1 Harpst Street Arcata, CA 95521

6. General Plan Designation and Zoning:

The project site is designated and zoned for residential low density uses by the City of Arcata; however, it is currently owned by Cal Poly Humboldt. As a constitutionally authorized State entity, CSU is not subject to local governments' regulations, such as City or County General Plans or land use ordinances, on property owned or controlled by CSU and used in furtherance of CSU's mission. Although there is no formal mechanism for joint planning, the CSU may consider, for coordination purposes, aspects of local plans and policies when it is appropriate and feasible. Campuses generally seek to maintain an ongoing exchange of ideas and information, and to pursue mutually acceptable solutions for issues that confront both the campuses and their surrounding communities.

7. Description of Project:

The California State Polytechnic University at Humboldt (Cal Poly Humboldt) proposes to develop and operate a parking lot and shuttle station (the project) at 2000 Foster Avenue (Assessor's Parcel Number 505-161-011). The project site is owned by the Board of Trustees of the California State University (CSU). The project would be developed in a single phase and would result in paving of the project site to support long-term student parking, improved access to the project site, provision of shuttle stops within the parking lot and at the intersection of 17th and Q Street, landscaping, lighting, and bioretention facilities to support on-site stormwater management. In addition, the project involves modification of the Humboldt State University 2004 Master Plan (Campus Master Plan) to remove the approved Parking Structure P from the main campus and include the project site as part of the Campus Master Plan.

8. Surrounding Land Uses and Setting:

The project site is currently undeveloped, consisting primarily of nonnative/ornamental shrubs and ruderal vegetation, with some barren and graveled areas, as well as concrete pad remnants of a former lumber mill. The eastern boundary of the project site is formed by McDaniel Slough and an associated riparian corridor, and shallow drainage ditches line Foster Avenue along the southern boundary of the project site. The project site is bordered by residential uses to the north and east, rural residential and agricultural uses to the west and to the south of Foster Avenue, and fallow agricultural land to the west.

9. Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement)

The following permits and approvals would be required for the proposed project:

- ► California Division of State Architect review of accessibility compliance
- ▶ California Department of Fish and Wildlife Lake and Streambed Alteration Agreement
- United States Army Corps of Engineers Clean Water Act Section 404 Permit
- ▶ North Coast Regional Water Quality Control Board National Pollutant Discharge Elimination System construction stormwater permit (Notice of Intent to proceed under General Construction Permit) and Clean Water Act Section 401 Water Quality Certificate for impacts to waters of the United States
- ► City of Arcata roadway encroachment permits, utility easement, and installation of new shuttle stop at 17th and O Street
- 10. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

As described further in Section 3.18, "Tribal Cultural Resources," on June 24, 2024, Cal Poly Humboldt sent notification letters that the project was being addressed under CEQA, as required by PRC 21080.3.1, to the three Native American tribes that had previously requested such notifications: Blue Lake Rancheria, Wiyot Tribe, and Bear River Band of Rohnerville Rancheria. Blue Lake Rancheria and Bear River Band of Rohnerville Rancheria did not respond to the AB 52 notification letters. The Wiyot Tribe responded on November 1, 2024, that the project's activities do not appear to present a significant impact on cultural resources. The Wiyot Tribe also request that inadvertent archaeological discovery protocols be in place for any ground disturbing activities. The Wiyot Tribe's request has been incorporated in Section 3.5, Cultural Resources, Mitigation Measure 3.5-1. No further responses were received from the Wiyot Tribe.

Refer to Section 3.18, "Tribal Cultural Resources," of this Initial Study for additional information.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

	tion
☐ Aesthetics ☐ Hazards / Hazardous Materials ☐ Transportation	
\square Agriculture and Forest Resources \square Hydrology / Water Quality \square Tribal Cultu	ural Resources
☐ Air Quality ☐ Land Use / Planning ☐ Utilities / S	Service Systems
☐ Biological Resources ☐ Mineral Resources ☐ Wildfire	
•	Findings of
☐ Energy ☐ Population / Housing ☐ Significance	9
☐ Geology / Soils ☐ Public Services ☐ None	
☐ Greenhouse Gas Emissions ☐ Recreation ☐ None with Incorporate	3

The environmental factors checked below would be potentially affected by this project, involving at least one impact

DETERMINATION (To be completed by the Lead Agency)

On the	basis of this initial evaluation:		
	I find that the proposed project could not DECLARATION will be prepared.	have a significant effect on the environment, and a	NEGATIVE
	3 1 1 1 3	COULD have a significant effect on the environment, revisions in the project have been made by or agre VE DECLARATION will be prepared.	
	I find that the proposed project MAY have IMPACT REPORT is required.	e a significant effect on the environment, and an EN	VIRONMENTAL
	mitigated" impact on the environment, but document pursuant to applicable legal sta	e a "potentially significant impact" or "potentially sign at at least one effect 1) has been adequately analyze andards, and 2) has been addressed by mitigation n ached sheets. An ENVIRONMENTAL IMPACT REPOF emain to be addressed.	ed in an earlier neasures based
	potentially significant effects (a) have been pursuant to applicable standards, and (b)	could have a significant effect on the environment, n analyzed adequately in an earlier EIR or NEGATIV have been avoided or mitigated pursuant to that ea ons or mitigation measures that are imposed upon	E DECLARATION arlier EIR or
Signatu	re	Date	
Printed	Name	Title	
Agency			

3.1 AESTHETICS

ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. Aesthetics. Except as provided in Public Resources Code section 21099 (where aesthetic impacts shall not be considered significant for qualifying residential, mixed-use residential, and employment centers), would the project:				
a) Have a substantial adverse effect on a scenic vista?			\boxtimes	
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 points.) 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?				

3.1.1 Environmental Setting

Aesthetic resources are generally defined as both the natural and built features of the landscape that contribute to the public's experience and appreciation of the environment. Aesthetic impacts may occur depending on the extent to which a project's presence would negatively alter the perceived visual character and quality of the environment.

SITE CHARACTERISTICS

The project site is approximately 16.7 acres in size, is relatively flat and open, and primarily consists of mowed nonnative/ornamental shrubs and ruderal vegetation, as well as remnants of concrete pads from past use of the site as a mill. The site includes ditches, which drain to McDaniel Slough, and a disused railbed that border the southern edge of the site. Mature trees and vegetation consistent with typical riparian habitat, present on the southern and eastern edge of the project site, are visible from Foster Avenue. McDaniel Slough borders the project site along its eastern edge.

The project site contains a range of land types and cover, including urban/barren, nonnative/ornamental shrubland and ruderal grassland habitat cover. Riparian habitat along the slough is characterized by dense growth of primarily English ivy and Himalayan blackberry, as well as riparian trees (see Section 3.34, "Biological Resources," for a description of the species found on the project site). The central portion of the project site is primarily ruderal grassland and nonnative ornamental shrubs, with some barren and graveled areas. A series of freshwater emergent wetlands and seasonal wetlands run along the northern edge of Foster Avenue, just inside the project site boundary.

VIEW OF AND FROM THE PROJECT SITE

The project site is bounded by residential uses to the north and east, rural residential uses and Foster Avenue to the south, and agricultural land to the west (Figure 2-2). Land uses surrounding the project site are primarily rural residential and agricultural in nature to the west and south and residential to the north and east. While the City of Arcata lies north and east of the project site, extensive agricultural lands to the south and west of the project site are known as the Arcata Bottom, which extends into Humboldt County west to the Mad River Slough and the Manila Dunes.

Views of the project site are relatively open from the west due to the lightly developed, open agricultural nature of land uses in those directions, particularly along Foster Avenue. More limited views of the project site are also available from the multi-family and single-family residential uses that border the eastern, southern, and northern borders, respectively, of the project site. Views to and from the project site from the eastern residential neighborhood are largely blocked by the mature trees and other riparian vegetation associated with McDaniel Slough. The single family homes to the north of the project site are fenced, which limits views to and from the project site. Views from the south are also obscured by existing vegetation along the project site frontage at Foster Avenue. Although the project site is not intended or open for general public use, access throughout the project site is available along dirt paths.

SCENIC RESOURCES

A scenic vista is generally defined as a distant public view along or through an opening or corridor that is recognized and valued for its scenic quality, or a natural or cultural resource that is indigenous to the area. Due to the surrounding topography, adjacent development, and existing vegetation, the project site is not visible from most areas designated by the City or County as a scenic vista or view area such as the Arcata Bottom, Fickle Hill Ridge, Arcata Bay, or the Mad River.

According to the California Scenic Highway Mapping System, United State (US) 101 and State Route (SR) 299 are listed as eligible scenic highways. The nearest officially designated scenic highway is a portion of US 101, located in Del Norte County, approximately 60 miles north of the project (Caltrans 2024). Roadways adjacent to the project site are not considered scenic City of Arcata General Plan 2020 designates all public roads west of the City in the Arcata Bottom as scenic (City of Arcata 2024). The project site is located to the east of the Arcata Bottom.

LIGHT AND GLARE

The project site is currently undeveloped and does not contain any light fixtures or features that create glare (i.e., reflective surfaces, metal fixtures). A minor amount of indirect nighttime illumination of the site may be generated by adjacent residential or industrial uses (e.g. lights from residences to the north, east, or south or from Sun Valley Floral Farms, northwest of the project site); however, these potential light sources are not strong enough to illuminate the project site and are expected to be insubstantial. Periodic illumination occurs from the headlights of vehicles traveling on Foster Avenue and Q Street.

3.1.2 Discussion

The effects of the project on the visual environment are generally defined in terms of the project's physical characteristics and potential visibility, the extent to which the project's presence would change the perceived visual character and quality of the environment, and the expected level of sensitivity that the viewing public may have where the project would alter existing views.

a) Have a substantial adverse effect on a scenic vista?

Less than significant impact. Due to the surrounding topography and intervening development and vegetation, the project site is not generally not visible from most areas of scenic importance in the City, such as the public vantagepoints of Arcata Bay and the Pacific Ocean. Views that may include the Arcata Bottom from within the City or along nearby roadways would not be obscured by the project because finished grade and topography on-site would

remain similar to existing conditions (i.e., flat and relatively open). The project site is located along Foster Avenue. As discussed above under subheading, "Scenic Resources," all public roadways west of the City of Arcata in the Arcata Bottoms are considered scenic resources in the 2020 City of Arcata General Plan.

Development of the parking lot, shuttle station with bicycle parking, and bioretention basin are anticipated to begin in Winter 2025 and would be completed by Summer 2026. Before construction activities begin, temporary fencing would be installed around the active construction area and other security measures, such as lighting, would be installed to prevent unauthorized access and promote site safety. Construction staging would occur on-site and would avoid the riparian corridor adjacent to eastern edge of the project site boundary and the drainage ditches along the southern site boundary. During the construction period, various types of construction equipment (e.g., backhoes, graders, and pavers) would be present on-site. Project construction would include site grading and excavation, utility trenching, and paving. Generally, these activities would not be perceptible to travelers because they would occur at ground level and would be obscured by temporary construction fencing and existing vegetation.

Upon completion of the project, approximately 4 acres of the project site would contain a lighted asphalt-paved parking lot, a shuttle station with bicycle parking, and drainage facilities including a bioretention basin, which would cover approximately 4 acres, and the remaining 12 acres of undeveloped land would remain undeveloped and periodically mowed. Views from residences along the eastern, southern, and northern sides of the project site would remain largely obscured due to the continued presence of vegetation, including the riparian corridor associated with McDaniel Slough. The project would be visible along Foster Avenue to motorists at the two proposed driveway points and from certain viewpoints available to the rural residences to the south. However, because the parking lot would remain at ground-level, there would not be substantial effects on scenic vistas associated with areas designated by the City or County as a scenic vista or view area (e.g., Arcata Bottom, Fickle Hill Ridge, Arcata Bay, or the Mad River, as noted under subheading "Scenic Resources," above). Additionally, the site would be landscaped with trees along the western edge of the site (e.g., shore pine, silk tassel, wax myrtle) and southern edge of the site (red cedar), which would obscure views of the site from along Foster Avenue. As a result, a substantial adverse change on long distance views is not anticipated, and impacts on scenic vistas would be less than significant, and no mitigation is required.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No impact. The project site consists of vacant land that contains concrete pad remnants from a former mill and non-native vegetation, and no scenic resources are considered present. Further, the project site is not visible from US 101 or SR 299, which are designated as eligible scenic highways in the vicinity of the project site. Thus, there would be **no impact** on scenic resources within a state scenic highway corridor, and no mitigation is required.

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 points.) 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. Private views of the project site are limited to the residences that surround the project site, while public views would primarily consist of those traveling along Foster Avenue. The perception of visual quality is subjective; however, the general conditions on the project site are not likely to be considered high quality, notable views because the land is generally covered with non-native vegetation and remnants of a previous mill that operated on the project site.

As described under a) above, construction activities would occur on the project site for a period of approximately 6 months. Before construction activities begin on any project component, temporary fencing would be installed around the construction area. During the construction period, various types of construction equipment (e.g., backhoes, graders, and pavers) would be present on-site. Project construction would include site clearing, grading, utility trenching, and paving. These activities would generally not be noticeable to surrounding areas because the activities would occur at grade and would be obscured by construction fencing and, to the east, riparian vegetation along McDaniel Slough.

Upon completion of the project, a portion of the non-native vegetated areas would be replaced with an asphalt-paved parking area, a shuttle station with bicycle parking, and a bioretention basin. While such development is generally not considered to represent a high-quality public scenic resource, the project site would be cleared of unmaintained non-native vegetation and remnants of the former mill and would continue to be maintained into the future by Cal Poly Humboldt. Furthermore, the proposed parking lot would be landscaped with trees (e.g., shore pine, silk tassel, wax myrtle) along its western edge and with red cedar along its southern edge, and unpaved areas would be mowed periodically, all of which would present a more maintained appearance compared to the existing condition of the project site. In addition, development of the parking area would improve the visibility of McDaniel Slough, which may be considered aesthetically pleasing due to the presence of riparian habitat and mature trees. Overall, the project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. For these reasons, this impact would be **less than significant**, and no mitigation is required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than significant impact with mitigation incorporated. Construction activities would occur during the daytime between the hours of 8:00 a.m. and 7:00 p.m. on Monday through Friday, with the potential for weekend construction on Saturday between 9:00 a.m. and 7:00 p.m. Security lighting may be used on-site at nighttime to deter unauthorized access and promote site safety. Construction lighting would have potential for spillover effects to adjacent properties that could be sensitive to nighttime lighting, such as single-family residences adjacent to the project site. Due to the size of the project site, construction-related light sources would represent a substantial, albeit temporary, new source of lighting at the project site.

The project would include new lighting within the parking lot to support safety for users of the site. Light fixtures would be fitted with light-emitting diode (LED) lamps with lighting controls and would be shielded and deliberately located to reduce potential spillover light onto adjacent properties. No high-mast lighting fixtures (i.e., poles greater than 25 feet tall) would be installed. The maximum height of lighting standards would be consistent with those currently located along Heather Lane and at the Westwood Garden Apartments complex. The new lighting would be partially obscured for residential uses to the east by the existing riparian corridor associated with McDaniel Slough. Visible light from the site would also be reduced upon establishment of proposed trees that would line the southern and western edge of the site. Regardless, exterior lighting (including direct illumination from parking vehicles) at the project site would still be visible from adjacent residential development. The proposed lighting would represent a substantial increase in existing lighting because there is currently no lighting associated with the project site, and thus the proposed increase could affect nearby residential land uses that are sensitive to nighttime lighting. As a result, this would be a **significant impact**.

Mitigation Measures

Mitigation Measure 3.1-4: Reduce Light Pollution from Exterior Lighting

To reduce light pollution, the following shall be implemented during construction and operation of the project by the contractor:

- Outdoor light fixtures, including temporary fixtures used during construction, that are not attached or interior to a building shall be limited to a maximum height of 14 feet.
- ▶ Outdoor lighting shall utilize energy-efficient fixtures and lamps and motion sensors and/or daylight sensors.
- ▶ Outdoor lighting fixtures, including temporary fixtures used during construction, shall be shielded or recessed to reduce light spillover to adjoining properties.
- ► Each light fixture shall be directed downward and away from adjoining private properties and McDaniel Slough, so that no on-site light fixture directly illuminates an area off-site.
- ▶ No permanently installed lighting shall blink, flash, or be of unusually high intensity or brightness.

Significance after Mitigation

As a statutorily and legislatively created State entity, Cal Poly Humboldt is not subject to local regulations, such as the Arcata Land Use Code. However, Cal Poly Humboldt is committed to reducing the effects of light and glare on adjoining properties in a manner that is largely consistent with Section 9.30.070, "Outdoor Lighting," of the Arcata Land Use Code. Implementation of Mitigation Measure 3.1-4 would require shielding and downward directed lighting to be used during construction and operation. With implementation of this measure, off-site light spillage would be prevented such that the project would not represent a substantial source of light and glare. With incorporation of mitigation, impacts would be **less than significant**.

3.2 AGRICULTURE AND FOREST RESOURCES

ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. Agriculture and Forest Resources. 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, as updated) prepared by the California Department 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?			\boxtimes	
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?				\boxtimes
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?				\boxtimes
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?				

3.2.1 Environmental Setting

The project site is located on vacant land, primarily covered with Himalayan blackberry and other non-native vegetation. No farmland under the Farmland Mapping and Monitoring Program of the California Resources Agency is mapped in Humboldt County (DOC 2024a). However, according to the Natural Resources Conservation Services soil

maps, the site contains Jollygiant, Arlynda, and Dungan soils. Of these soils, Jollygiant is considered Prime Farmland if irrigated and drained and Dungan is considered Prime Farmland if irrigated (DOC 2024b).

However, a geotechnical study recently completed for the site indicates that the original native topsoil was removed and replaced with fill materials, which were placed across most of the project site. The fill materials, consisting of imported river-run gravels mixed with silt, sand, and crushed rock, range in thickness between one and five feet. Additionally, much of the subsurface infrastructure associated with the former mill that occupied the site remains intact. Old concrete floors and slabs are visible at the surface, and a buried culvert was encountered in a test pit evaluated as part of the geotechnical study (SHN 2024).

While some trees are present along the riparian area associated with McDaniel Slough, they would not be considered 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]).

3.2.2 Discussion

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?

Less than significant impact. As discussed above, Jollygiant is considered Prime Farmland if irrigated and drained and Dungan is considered Prime Farmland if irrigated (DOC 2024b). However, the project site is not irrigated and was previously developed as a mill. Furthermore, as discussed above, a geotechnical study of the project site indicates that the native topsoil has been removed and replaced with fill materials across most of the site. Additionally, subsurface infrastructure associated with the former mill that occupied the site remains intact. Therefore, because soils on the site are not associated with Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, and impacts related to conversion of Farmland would be less than significant.

- b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

 No impact. The project site is not zoned for or under a Williamson Act contract for agricultural uses. Therefore, there would be no impact, and no mitigation is required.
- 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?

No impact (c), d), and e)). No forest land, timberland, or timberland zoned Timberland Production is present on the project site. Therefore, the project would not involve changes to forest land or timberland, and there would be **no impact**, and no mitigation is required.

3.3 AIR QUALITY

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Wh the pol	Air Quality. ere available, the significance criteria established by applicable air quality management district or air lution control district may be relied on to make the owing determinations.				
dist	significance criteria established by the applicable air crict available to rely on for significance erminations? Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?			\boxtimes	
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?			\boxtimes	
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			\boxtimes	

3.3.1 Environmental Setting

CLIMATE, METEOROLOGY, AND TOPOGRAPHY

The project is located in the North Coast Air Basin (NCAB). In general, the climate of northern coastal California is characterized by cool summers and mild winters with frequent fog and substantial amounts of rain. In coastal areas, the ocean helps to moderate temperatures year-round. Further inland, the summers are hotter and drier and the winters colder and snowier. At higher elevations in inland areas, it is cooler in the summers and snowier in the winter. The average annual rainfall in Humboldt County is 38 inches in Eureka. Approximately 90 percent of the annual precipitation falls between October and April. Higher rainfall in winter often influences high river levels. Winter snowfall is common at higher elevations. The dry season is between May and September (Humboldt County 2017).

Average temperatures on the coast in Eureka range from the low 60s in the summer to the low 40s during the winter. Inland average temperatures, such as in Willow Creek or Hoopa, range from the 90s to the 30s. On the coast, summer fog is common when inland temperatures rise (Humboldt County 2017).

Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to drive the movement and dispersal of air pollutants. Winds control the rate and dispersion of local pollutant emissions. In the NCAB, dominant winds exhibit a seasonal pattern, especially in coastal areas. In the summer months, strong north to northwesterly winds are common and during the winter, storms from the South Pacific increase the percentage of days with winds from southerly quadrants. Wind direction often assumes a daily pattern in the river canyons that empty into the Pacific. In the morning hours, cool air from higher elevations flows down the valleys while later in the day as the lower elevation air heats up, this pattern is reversed and the airflow heads up the canyon. These airflows are often quite strong. Offshore and onshore flows are also common along the coast and are

associated with pressure systems in the area. Onshore flows frequently bring foggy cool weather to the coast, while offshore flows often blow fog away from the coast and bring sunny warm days (Humboldt County 2017).

Humboldt County commonly experiences two types of inversions, vertical and horizontal, that affect the vertical depth of the atmosphere through which pollutants can be mixed. Vertical air movement is important in spreading pollutants through a thicker layer of air. Horizontal movement is important in spreading pollutants over a wider area. Upward dispersion of pollutants is hindered wherever the atmosphere is stable; that is, where warm air overlies cooler air below (Humboldt County 2017).

Because of the region's topography and coastal air movements, inversion conditions are common in the NCAB. Inversions are created when warm air traps cool air near the ground surface and prevents vertical dispersion of air. Valleys, geographic basins, and coastal areas surrounded by higher elevations are the most common locations for inversions to occur. During the summer, inversions are less prominent, and vertical dispersion of the air is good. However, during the cooler months between late fall and early spring, inversions last longer and are more geographically extensive; vertical dispersion is poor, and pollution may be trapped near the ground for several concurrent days (Humboldt County 2017).

Radiation inversion occurs when the air layer near the surface of the ground cools and may extend upward several hundred feet. Radiation inversion in Humboldt County is found in the night and early mornings almost daily, but is more prominent from late fall to early spring when there is less sunlight and it is cooler. Radiation inversion tends to last longer into the morning during the winter months than in the summer (Humboldt County 2017).

Subsidence inversion is caused by downward moving air aloft, which is common in the area of high pressure along and off the coast. The air warms at a rate of 5.5 degrees Fahrenheit (°F) per 1,000 feet as it descends. Thus, it arrives at a lower height warmer than the air just below and limits the vertical mixing of air. Subsidence inversion often affects a large area and is more common during the summer months. This inversion, which usually occurs from late spring through the early fall, can be very strong and shallow given the cooling of the lower layers from the cool ocean water (Humboldt County 2017).

In the NCAB, air quality is predominantly influenced by the climatic regimes of the Pacific. In summer, warm ground surfaces draw cool air in from the coast, creating frequent thick fogs along the coast and making northwesterly winds common. In winter, precipitation is high, wintertime surface wind directions are highly variable, and weather is more affected by oceanic storm patterns (NCUAQMD 1995: II-1 to II-3).

CRITERIA AIR POLLUTANTS

Criteria air pollutants are those pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive people from illness or discomfort.

A brief description of key criteria air pollutants in the NCAB and their health effects are provided below. Criteria air pollutants include ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), respirable particulate matter (particulate matter with an aerodynamic resistance diameter of 10 micrometers or less) (PM₁₀), fine particulate matter (particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less) (PM_{2.5}), and lead. However, ozone and PM₁₀ are the criteria air pollutants of primary concern in this analysis because of their nonattainment status with respect to the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). The attainment status of criteria air pollutants with respect to the NAAQS and CAAQS in Humboldt County are shown in Table 3.2-1.

Table 3.2-1 Attainment Status Designations for Humboldt County

Pollutant	National Ambient Air Quality Standard	California Ambient Air Quality Standard
Ozone	No Federal Standard	Attainment (1-hour) Classification
	Attainment	Attainment (8-hour)
Respirable particulate matter	Unclassified/Attainment (24-hour)	Nonattainment (24-hour)
		Attainment (Annual)
Fine particulate matter	Unclassified/Attainment (24-hour)	(No state standard for 24-Hour)
	Unclassified/Attainment (Annual)	Attainment (Annual)
Carbon monoxide	Unclassified (1-hour)	Attainment (1-hour)
	Unclassified (8-hour)	Attainment (8-hour)
Nitrogen dioxide	Unclassified (1-hour)	Attainment (1-hour)
	Unclassified (Annual)	Attainment (Annual)
Sulfur dioxide	Unclassified (1-Hour)	Attainment (1-hour)
		Attainment (24-hour)
Lead (Particulate)	No Attainment Information	Attainment (30-day average)
Hydrogen Sulfide		Attainment (1-hour)
Sulfates	No Federal Standard	Attainment (24-hour)
Visibly Reducing Particles		Attainment (8-hour)
Vinyl Chloride	7	No Attainment Information

Notes: PM_{10} = particulate matter less than 10 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; NO_2 = nitrogen dioxide; CO = carbon monoxide; SO_2 = sulfur oxides;

Source: EPA 2025, CARB 2024.

Ozone

Ground-level ozone is not emitted directly into the air but is created by chemical reactions between reactive organic gas (ROG) and oxides of nitrogen (NO_X). This happens when pollutants emitted by cars, power plants, industrial boilers, refineries, chemical plants, and other sources chemically react in the presence of sunlight. Ozone at ground level is a harmful air pollutant because of its effects on people and the environment, and it is the main ingredient in smog (EPA 2016).

Acute health effects of ozone exposure include increased respiratory and pulmonary resistance, cough, pain, shortness of breath, and lung inflammation. Chronic health effects include permeability of respiratory epithelia and possibility of permanent lung impairment (EPA 2016). Emissions of the ozone precursors ROG and NO_X have decreased over the past two decades because of more stringent motor vehicle standards and cleaner burning fuels (CARB 2013).

Nitrogen Dioxide

 NO_2 is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO_2 are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO_2 . The combined emissions of NO and NO_2 are referred to as NO_X and are reported as equivalent NO_2 . Because NO_2 is formed and depleted by reactions associated with photochemical smog (ozone), the NO_2 concentration in a particular geographical area may not be representative of the local sources of NO_X emissions (EPA 2012).

Acute health effects of exposure to NO_X includes coughing, difficulty breathing, vomiting, headache, eye irritation, chemical pneumonitis, or pulmonary edema, breathing abnormalities, cough, cyanosis, chest pain, rapid heartbeat, and death. Chronic health effects include chronic bronchitis and decreased lung function (EPA 2016).

Particulate Matter

 PM_{10} is emitted directly into the air, and can include fugitive dust, soot, and smoke from mobile and stationary sources, construction operations, fires and natural windblown dust, and particulate matter formed in the atmosphere by reaction of gaseous precursors (CARB 2013). $PM_{2.5}$ includes a subgroup of smaller particles that have an aerodynamic diameter of 2.5 micrometers or less. PM_{10} emissions in the NCAB are dominated by emissions from area sources, primarily fugitive dust from vehicle travel on unpaved and paved roads, farming operations, construction and demolition, and particles from residential fuel combustion. Direct emissions of PM_{10} and $PM_{2.5}$ are projected to remain relatively constant through 2035. Emissions of $PM_{2.5}$ in the NCAB are dominated by the same sources as emissions of PM_{10} (CARB 2013).

Acute health effects of PM_{10} exposure include breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, and premature death. Chronic health effects include alterations to the immune system and carcinogenesis (EPA 2016).

TOXIC AIR CONTAMINANTS

According to the *California Almanac of Emissions and Air Quality*, the majority of the estimated health risks from toxic air contaminants (TACs) can be attributed to relatively few compounds, the most important being diesel PM (CARB 2013). Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emissions control system is being used. Unlike the other TACs, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. However, CARB has made preliminary concentration estimates based on a PM exposure method. This method uses the CARB emissions inventory's PM₁₀ database, ambient PM₁₀ monitoring data, and the results from several studies to estimate concentrations of diesel PM. In addition to diesel PM, the TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

Diesel PM poses the greatest health risk among these 10 TACs mentioned. Based on receptor modeling techniques, CARB estimated the average statewide cancer risk associated with diesel PM concentrations to be 360 excess cancer cases per million people in the year 2020 (CARB 2000:15). Overall, statewide emissions of diesel PM are forecasted to decline by 71 percent between 2000 and 2035 (CARB 2013:3-8).

ODORS

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals can smell very minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; an odor that is offensive to one person may be perfectly acceptable to another (e.g., fast food restaurant). It is important to also note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity. Typical odor sources of concern include wastewater treatment plants, sanitary landfills, composting facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting operations, rendering plants, and food packaging plants (SMAQMD 2016).

ASBESTOS

Naturally occurring asbestos (NOA) was identified as a TAC in 1986 by CARB. NOA is located in many parts of California, and is commonly associated with ultramafic rocks, according to a special publication by the California Geological Survey (Churchill and Hill 2000). Asbestos is the common name for a group of naturally occurring fibrous silicate minerals that can separate into thin but strong durable fibers. Ultramafic rocks form in high-temperature environments well below the surface of the earth. By the time they are exposed at the surface by geologic uplift and erosion, ultramafic rocks may be partially to completely altered into a type of metamorphic rock called serpentinite. Sometimes the metamorphic conditions are right for the formation of chrysotile asbestos or tremolite-actinolite asbestos in the bodies of these rocks, along their boundaries, or in the soil.

Asbestos could be released into the air from serpentinite or ultramafic rock if the rock is broken or crushed. At the point of release, asbestos fibers could become airborne, causing air quality and human health hazards. Natural weathering and erosion processes act on asbestos bearing rock and soil, increasing the likelihood for asbestos fibers to become airborne if disturbed (CGS 2002:22).

According to the report, A General Location Guide to Ultramafic Rocks in California—Areas More Likely to Contain Naturally Occurring Asbestos, there are areas of Humboldt County in which asbestos is likely to occur (Churchill and Hill 2000). Asbestos-containing material may be present in existing structures at the project site. The demolition or renovation of existing structures would be subject to regulatory requirements for the control of asbestos-containing material.

SENSITIVE RECEPTORS

Sensitive receptors are generally considered to include those land uses where exposure to pollutants could result in health-related risks to sensitive individuals, such as children or the elderly. Residential dwellings, schools, hospitals, playgrounds, and similar facilities are of primary concern because of the presence of individuals particularly sensitive to pollutants and/or the potential for increased and prolonged exposure of individuals to pollutants.

Nearby sensitive receptors to the project site include residences as close as approximately 25 feet from the northern, eastern, and southern boundaries of the project site, as well as a school approximately 730 feet southwest of the project site. These sensitive receptors are discussed in greater depth under Impact "c" below.

3.3.2 Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than significant impact. With respect to the CAAQS, the Humboldt County portion of NCAB is in nonattainment for PM₁₀ but attainment for all other pollutants. As a result, the 1995 PM₁₀ Attainment Plan is the only applicable air quality plan for the area. The PM₁₀ Attainment Plan includes an emissions budget and outlines recommended control measures to reduce emissions and attain the PM₁₀ standard. The governing land use document relevant to the project area is the adopted 2004 Master Plan for Cal Poly Humboldt (Campus Master Plan). Additionally, while Cal Poly Humboldt is not subject to local government planning and land use plans, policies, or regulations, the City of Arcata's General Plan Land Use Element provides policies to address land use and planning within the city and to guide sustainable development that meets their land use and planning needs. Projects that propose development consistent with the growth anticipated in the Campus Master Plan and the City's General Plan are considered consistent with regional air quality plans. A project may be inconsistent with air quality plans if it would result in population or employment growth that exceeds estimates used to develop the emissions inventories for the regional air quality plans. Because the Campus Master Plan growth projections were used to inform the broader growth projections for the region, which were then used to develop regional air quality plans like the 1995 PM₁₀ Attainment Plan, the project would be consistent with the applicable air quality plans and planning efforts.

In addition, development and operation of the project would comply with the CSU Sustainability Policy, which was first adopted in 2014 and most recently updated in 2024. The CSU Sustainability Policy requires consideration of project operations to support sustainability-focused actions such as energy conservation, carbon reduction, utility management, water conservation and waste management. The project would not utilize natural gas during operation and would reduce vehicle miles traveled (VMT) by 8,981 compared to the baseline scenario, therefore reducing criteria pollutant emissions from the combustion of fossil fuels used for transportation (Appendix A). As detailed under Impact "b" below and shown in Table 3.2-2, emissions associated with construction of the project would not exceed North Coast Unified Air Quality Management District's (NCUAQMD) threshold for NO_X and would therefore not conflict with NCUAQMD's air quality plans meant to attain the NAAQS and CAAQS. This impact is **less than significant**, and no mitigation is required.

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?

Less than significant impact. As stated above, Humboldt County is in attainment of (or was unclassified for) all state and federal ambient air quality standards with the exception of the state standard for PM_{10} . Implementation of the project would involve the construction of a parking lot consisting of 212 parking spaces, a shuttle station, and bicycle parking. Operation of the project would involve commute trips to and from the parking lot on weekdays, as well as the operation of a shuttle service that would also operate on weekdays shuttling students between the parking lot and the Cal Poly Humboldt campus.

Construction of the project has the potential to generate air quality impacts through the use of vehicles and heavy-duty construction equipment (e.g., bulldozers, pavers, graders), construction workers' vehicle trips, material deliveries, and trips by heavy-duty haul trucks. In addition, earthwork activities would result in fugitive dust emissions, and paving operations would release ROGs during off-gassing of paved materials. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources.

Construction

Construction and operational emissions of criteria air pollutants associated with the project were calculated using the California Emissions Estimator Model (CalEEMod) version 2022.1.1.24 computer program (CAPCOA 2022). Modeling was based on project-specific information (e.g., number of parking spaces, area graded, and material import and export quantities) where available, reasonable assumptions based on typical construction activities, and default values in CalEEMod that are based on the project site location and land use type. Construction activities would begin in Winter 2025 and conclude in Spring 2026. See Appendix B for detailed modeling assumptions and calculations. Table 3.2-2 below provides an estimation of the construction-related emissions associated with implementation of the project.

_									
Table 3.2-2 Maximum Daily Construction-Generated Emissions									
below provides an estimation of the construction-related emissions associated with implementation									

Construction Year	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SO _X (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
2025	3	31	28	<1	16	8
2026	12	4	7	<1	<1	<1
Maximum Daily Emissions	12	31	28	<1	16	8
NCUAQMD Threshold	50	50	500	80	80	50
Exceeds Threshold?	No	No	No	No	No	No

Notes: VOC = volatile organic compounds; NO_x = nitrogen oxides; CO = carbon monoxide; SO_2 = sulfur oxides; PM_{10} = particulate matter less than 10 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = pa

Source: Modeled by Ascent in 2025. See Appendix B.

As shown in Table 3.2-2, emissions from construction of the project would not exceed AQMD's thresholds of significance for any pollutant.

Operation

On-site uses associated with operation of the project could result in emissions associated with on-road vehicle trips generated by the project as well as from area sources (e.g., landscaping equipment.). Table 3.2-3 below provides a summary of the operations-related emissions associated with implementation of the project. See Appendix B for detailed calculations and assumptions.

Table 3.2-3 Maximum Daily Operations-Generated Emissions

Operational Source	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SO ₂ (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Mobile Sources	2	3	14	<1	<1	<1
Area Sources	<1	0	0	0	0	0
Maximum Daily Emissions	2.	3	14	<1	<1	<1
NCUAQMD Threshold	50	50	500	80	80	50
Exceeds Threshold?	No	No	No	No	No	No

Notes: VOC = volatile organic compounds; NO_x = nitrogen oxides; CO = carbon monoxide; SO_2 = sulfur oxides; PM_{10} = particulate matter less than 10 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = particulate matter less than 2.5 micrometers in diameter; $PM_{2.5}$ = pa

Source: Modeled by Ascent in 2025. See Appendix B.

As shown in Table 3.2-3, emissions from operation of the project would not exceed NCUAQMD's thresholds of significance for any pollutant.

Summary

As detailed above, emissions associated with construction and operation of the project would not exceed NCUAQMD's numerical threshold. For this reason, this impact would be **less than significant**, and no mitigation is required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact. The focus of this TAC analysis is diesel PM. Although other TACs exist (e.g., benzene, 1,3-butadiene, hexavalent chromium, formaldehyde, methylene chloride), they are primarily associated with industrial operations and the project would not include any industrial sources. TACs from diesel PM are of particular importance because the potential cancer risk from inhalation of diesel PM outweighs the risk for all other health impacts (i.e., noncancer chronic risk, short-term acute risk) and health impacts from other TACs (OEHHA 2003).

Construction

Construction-related activities would result in temporary, intermittent emissions of diesel PM from the exhaust of off-road, heavy-duty diesel equipment used for site preparation (e.g., demolition, clearing, grading); paving; on-road truck travel; and other miscellaneous activities. On-road diesel-powered haul trucks traveling to and from the construction areas to deliver materials and equipment are less of a concern because they would not stay on the site for long periods of time.

With regards to exposure of diesel PM, the dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher level of health risk for any exposed receptor. Thus, the risks estimated for an exposed individual are higher if a fixed exposure occurs over a longer period.

Based on the emissions modeling conducted and presented in Table 3.2-1 above, maximum daily emissions of PM_{10} would be 16 pounds per day, of which approximately 1 pound per day would be in the form of diesel PM (the

remainder is fugitive dust) and would occur in 2025, when construction would occur. This maximum daily emission level represents multiple, simultaneous construction activities. It is more likely, however, that construction activities would be located at various locations throughout the approximately 4-acre project area during the construction period, and, due to the dispersive properties of diesel PM, concentrations from individual construction sites would be lower (e.g., decrease of 70 percent at 500 feet from the source) (CARB 2005). In addition, the use of off-road heavy-duty diesel equipment would be limited to the construction phase of approximately 6 months. Construction activity intensity and duration would vary throughout the project area. As such, no single existing or future receptor would be exposed to substantial construction-related emissions of diesel PM for extended periods of time.

Residential receptors are typically of primary concern when discussing TAC exposure, as they would generally be exposed to project-generated TACs for extended periods of time. The nearest sensitive receptors to the project area are residences located directly against the project area's northern and eastern boundaries. Other receptors include residences approximately 50 feet from the project area's southern boundary. Given the high atmospheric dispersion properties of PM_{2.5}. low level of diesel PM on-site and the short duration of activities, TAC exposure from construction activities would not be considered substantial at these receptors. Thus, given the temporary and intermittent nature of construction activities within the project area (i.e., construction is not confined to any one part of the project site), the dose of diesel PM of any one receptor would be limited.

Operations

The project would include development and operation of a new parking lot, shuttle station with bicycle parking, and a bioretention basin. None of these elements would result in any new stationary sources of TACs. The project would result in reconfiguring the location of parking for Cal Poly Humboldt students, which would result in a corresponding change to trip distribution. Compared to existing conditions, there would be an increase in vehicle trips and associated TAC emissions, but these trips would be dispersed throughout the parking lot and public roadways. Emissions would be generated by vehicle trips within the region with only a small portion of these trips occurring within the project area near sensitive receptors. As a result, the actual concentration near sensitive land uses resulting from project implementation would be minimal, and implementation of the project would not result in exposure of new or existing sensitive receptors to TACs from regular and frequent vehicle trips.

Considering the highly dispersive properties of diesel PM (i.e., mobile-source TACs) and the relatively low mass of diesel PM emissions that would be generated at any single place during the operation of the project, operation-related TACs are not anticipated to result in the exposure of sensitive receptors to substantial pollutant concentrations.

Carbon Monoxide Hotspots

Implementation I of the project would introduce new daily vehicle trips to the project site associated with operation of the parking lot. Based on the results of the transportation study conducted for the project (Appendix A), the project would result in approximately 424 new operational trips per day. NCUAQMD does not provide a threshold against which to assess mobile-source CO emissions. In leu of current guidance related to CO impacts from NCUAQMD, CEQA provides lead agencies the discretion to borrow thresholds from other air districts for use in analyses where needed. Bay Area Air Quality Management District (BAAQMD) offers up-to-date guidance regarding mobile source CO impacts. BAAQMD's CEQA Guide provides preliminary screening criteria to aid lead agencies in assessing whether implementing a project could result in CO emissions that exceed the thresholds of significance. BAAQMD's CEQA guide provides a screening threshold which states that project-generated traffic that would increase traffic volumes at affected intersections to more than 44,000 vehicles per hour would potentially result in a CO impact and would therefore require further analysis. The project would result in approximately 424 new trips per day. Specifically, the transportation study showed that AM peak-hour trips total approximately 88 trips while PM peak-hour trips total approximately 77 trips, with the remainder of the trips occurring during off-peak hours. Therefore, the number of vehicles traveling through intersections at any given time would be far fewer than 44,000 vehicles per hour. Moreover, CO emissions have historically decreased due to the advent of catalytic converters and progressively more stringent fuel economy standards. Thus, a CO hotspot would not result from project implementation.

Summary

Considering the relatively low levels of diesel PM emissions that would be generated by construction, the relatively short duration of diesel PM-emitting construction activity at any one location of the project area, and the highly dispersive properties of diesel PM, construction-related TAC emissions would not expose sensitive receptors to substantial pollutant concentrations or an incremental increase in cancer risk. Project operations would result in increased vehicle activity in the project area compared to existing conditions; however, these trips would be dispersed throughout the parking lot and public roadways. Thus, associated mobile-source emissions would be generated by vehicle trips within the region with only a small portion of these trips occurring within the project area near sensitive receptors. Thus, construction- and operation-related TAC emissions would not result in substantial pollutant concentrations or an incremental increase in cancer risk at nearby sensitive receptors. Regarding impacts related to CO hotspots, because the project would not meet the applicable screening criteria of 44,000 vehicles per hour through an intersection, the project would not result in a CO hotspot. This impact would be **less than significant**, and no mitigation is required.

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

Less than significant impact. The occurrence and severity of odor impacts depends on numerous factors, including: the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the affected receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generate citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose a substantial number of people to objectionable odors would be deemed to have a significant impact.

Typical odor sources of concern include wastewater treatment plants, sanitary landfills, composting facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting operations, rendering plants, and food packaging plants. The project would involve implementation of a parking lot, shuttle station with bicycle parking, and a bioretention basin, which are land uses that are not associated with the generation of objectionable odors.

Odors emitted in the exhaust of on-site engines during construction, particularly diesel-fueled engines, may be considered offensive to some individuals. The generation of these odorous emissions would vary on a day-to-day basis depending on the type of on-site activities taking place. However, the types of diesel-emitting equipment would not be unlike other diesel-powered equipment used in other development projects in the area. Such emissions would be intermittent in nature and only occur for the duration of construction activities and would dissipate rapidly with increasing distance from the source. For these reasons, the project would not result in the exposure of a substantial number of people to objectionable odors. This impact would be **less than significant**, and no mitigation is required.

3.4 BIOLOGICAL RESOURCES

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Biological Resources. ould 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 the US 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, or regulations or by the California Department of Fish and Wildlife or the US 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?				\boxtimes
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?				×

3.4.1 Environmental Setting

To determine the existing conditions on the project site, a biological reconnaissance and nesting bird survey were conducted on February 1 and 2, 2024 (Ascent 2024). An aquatic resources delineation was also conducted on the project site on June 13 and 14, 2023 (Cal Poly Humboldt 2023). Additionally, to determine the biological resources that may be subject to project impacts, the following data sources were reviewed:

- ► California Natural Diversity Database (CNDDB) (2024),
- ▶ California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2024),
- ▶ US Fish and Wildlife Service Information for Planning and Consultation (IPaC) search of study area (USFWS 2024), and
- aerial photographs of the project site and region.

The project site, which is currently being used as a construction laydown yard, is surrounded by private residences to the north of the site and along Heather Lane, east of McDaniel Slough, and by open space to the west and rural residential and agricultural uses to the south. Vegetation communities in open space areas surrounding the project site include pasture, cropland, annual grassland, and riparian forest.

VEGETATION AND HABITAT TYPES

Habitat types on the project site consist of urban/barren, nonnative/ornamental shrubland and ruderal grassland habitat cover, and the site is bordered on the south by freshwater emergent wetlands, seasonal wetlands, and Foster Avenue. McDaniel Slough, a tidally influenced perennial stream, and associated riparian habitat run generally northsouth along the eastern edge of the project site. Riparian habitat along the slough is characterized by dense growth of English ivy (Hedera helix), Himalayan blackberry, and riparian trees, including big-leaf maple (Acer macrophyllum), red alder (Alnus rubra), black cottonwood (Populus trichocarpa), coastal willow (Salix hookeriana), and western sword fern (Polystichum munitum). McDaniel Slough is characterized in the Arcata General Plan as a Class 1 fish-bearing stream (City of Arcata 2019). The central portion of the project site is primarily composed of ruderal grassland and nonnative ornamental shrubs, with some barren and graveled areas. Although native plants were planted by the Redwood Community Action Agency and the City of Arcata along the riparian zone during 1995 restoration efforts, maintenance of this vegetation was not performed afterward, and native plants have since been mostly displaced by nonnative plants (City of Arcata 2019). Nonnative vegetation (i.e., Himalayan blackberry) removal was undertaken by the university in this area in February 2024 to remove an impenetrable stand of nonnative Himalayan blackberry (Rubus armeniacus) (Ascent 2024). A series of freshwater emergent wetlands and seasonal wetlands run along the northern edge of Foster Avenue, just inside the project site. A grassland field and a large seasonal pond that provides Northern red-legged frog (Rana aurora) breeding habitat is present in the parcel west of the project site.

RIPARIAN HABITAT AND SENSITIVE NATURAL COMMUNITIES

Sensitive natural communities are those native plant communities defined by California Department of Fish and Wildlife (CDFW) as having limited distribution statewide or within a county or region and that are often vulnerable to environmental effects of projects (CDFW 2018). These communities may or may not contain special-status plants or their habitat (CDFW 2018). CDFW designates sensitive natural communities based on their state rarity and threat ranking using NatureServe's Heritage Methodology. Natural communities with rarity ranks of S1 to S3, where S1 is critically imperiled, S2 is imperiled, and S3 is vulnerable, are considered sensitive natural communities to be addressed in the environmental review processes of CEQA and its equivalents (CDFW 2018).

Sensitive natural communities are generally identified at the alliance level of vegetation classification hierarchy using the Manual of California Vegetation (Sawyer et al. 2009). There are no natural communities in the project area that meet the membership rules of any sensitive natural communities recognized in the Manual of California Vegetation. Known occurrences of sensitive natural communities are included in the CNDDB; however, no new occurrences have been added to the CNDDB since the mid-1990s when funding was eliminated for this portion of the CNDDB program. Additionally, these communities were mapped and classified in the CNDDB prior to publication of the Manual of California Vegetation and are classified according to Holland 1986, which is no longer the state standard for identifying California's natural communities. Two sensitive natural communities were identified within the nine USGS quadrangles including and surrounding the project area through a query of the CNDDB: northern coastal salt marsh and northern foredune grassland (CNDDB 2024). Neither of these sensitive natural communities are present in the project area; however, all riparian habitats, despite specific plant species associations, are protected pursuant to California Fish and Game Code Section 1602. California Fish and Game Code Section 2785 defines riparian habitat as "lands which contain habitat which grows close to and depends upon soil moisture from a nearby freshwater source."

COMMON WILDLIFE SPECIES

There are common wildlife species that use disturbed areas, including the project site and surrounding area, for foraging, roosting, and/or nesting. These species include native animals that have adapted well to living close to humans, such as red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), Virginia opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), western fence lizard (*Sceleroporus occidentalis*), and tree swallow (*Hirundo rustica*), as well as nonnative species, such as house sparrow (*Passer domesticus*) and European starling (*Sturnus vulgaris*). Due to the nature and location of the project site and surrounding area, it is likely that common native and nonnative wildlife species use the project site for breeding and move through the area on a regular basis while foraging.

SPECIAL-STATUS SPECIES

Special-status species are plants and animals that are legally protected under the federal Endangered Species Act (ESA), California Endangered Species Act (CESA), California Fish and Game Code, or local plans, policies, and regulations or that are otherwise considered sensitive by federal, state, or local resource conservation agencies. For the purposes of this IS/MND, special-status species are defined as:

- species listed or proposed for listing as threatened or endangered under the ESA;
- species designated as candidates for listing as threatened or endangered under the ESA;
- species listed, proposed for listing, or candidates for listing as threatened or endangered under CESA;
- species listed as fully protected under the California Fish and Game Code;
- animals identified by CDFW as species of special concern;
- ▶ plants considered by CDFW to be "rare, threatened or endangered in California" and assigned a California Rare Plant Rank of 1A, presumed extinct in California; 1B, considered rare or endangered in California and elsewhere; 2A, presumed extinct in California but more common elsewhere; and 2B, considered rare or endangered in California but more common elsewhere;
- species considered locally significant—that is, species that are not rare from a statewide perspective but are rare or uncommon in a local context, such as in a county or region (CEQA Section 15125[c]), or that are so designated in local or regional plans, policies, or ordinances (State CEQA Guidelines Appendix G); and
- ▶ taxa (i.e., taxonomic categories or groups) that meet the criteria for listing even if they are not currently included on any list, as described in CCR Section 15380 of the State CEQA Guidelines.

A total of 38 plant species and 35 wildlife species were identified as having potential to occur in the project area. Based on further evaluation of species ranges and habitat requirements and conditions on the project site, this list was ultimately pared down to seven special-status plant species and 21 special-status wildlife species that have potential to occur on or near the project site (Table 3.4-1; CNDDB 2024; CNPS 2024; USFWS 2024) (Attachment A). Other species evaluated during the desktop review were determined to not have potential to occur because they are restricted to habitat types that are not present within the project site (e.g., canyons, old-growth forest, sand dunes, salt marsh, conifer forest), they require areas further from human disturbance than the project site, or the project site is outside of the species' known range.

Table 3.4-1 Special-Status Plant and Wildlife Species With Potential to Occur in the Vicinity of the Project Site

Name	Federal Status ¹	State Status ¹	CRPR ¹	Habitat	Potential to Occur in the Project Area
Seaside bittercress Cardamine angulata	_	_	2B.1	North coast coniferous forest, lower montane coniferous forest. Wet areas, streambanks. 295–510 feet in elevation. Blooms (January), March–July. Perennial.	May occur: Suitable habitat for this species (streambanks) is present along McDaniel Slough.
Lyngbye's sedge Carex lyngbyei	_	_	2B.2	Marshes and swamps (brackish or freshwater). 0–655 feet in elevation. Blooms April–August. Geophyte.	May occur: Suitable habitat for this species (wetland) is present in the wetlands along Foster Ave and McDaniel Slough.
Northern meadow sedge Carex praticola	_		2B.2	Wetland. Meadows and seeps. Moist to wet meadows. 50–10500 feet in elevation. Blooms May– July. Perennial.	May occur: Suitable habitat for this species (wetland) is present in the wetlands along Foster Ave and McDaniel Slough.
Coast fawn lily Erythronium revolutum	_	_	2B.2	Bogs and fens, broadleafed upland forest, north coast coniferous forest. Mesic sites; streambanks. 195–4610 feet in elevation. Blooms March–July (August). Geophyte.	May occur: Suitable habitat for this species (streambanks) is present along McDaniel Slough.
Minute pocket moss Fissidens pauperculus	_		1B.2	North coast coniferous forest. Moss growing on damp soil along the coast. Bare, gravelly soil in dry streambeds and on stream banks. 35–3360 feet in elevation. Mosses do not have a blooming period.	May occur: Suitable habitat for this species (streambanks) is present along McDaniel Slough.
Crinkled rag lichen Platismatia lacunosa	_		2B.3	North coast coniferous forest, riparian woodland North coast coniferous forest, riparian woodland. Usually growing on Alnus. 65–6560 feet in elevation. Lichen does not have a blooming period	May occur: The riparian woodland along McDaniel Slough provides habitat suitable for this species.
Cylindrical trichodon Trichodon cylindricus	_	—	2B.2	Moss growing in openings on sandy or clay soils on roadsides, stream banks, trails or in fields. 165–4920 feet in elevation. Perennial.	May occur: Suitable habitat for this species (streambanks) is present along McDaniel Slough.
Invertebrates	_	- 1			
Habitat requirements include host plant (primarily milkweeds [Asclepias spp.]); as sources (i.e., flowering plants); and sites thermoregulation, mating, hibernation, escape. Additionally, monarch butterfly conditions and resources for initiating a completing migration both to and from roosting areas. Winter roost sites extend coast from northern Mendocino to Baja Mexico. Roosts located in wind-protected		Habitat requirements include host plants for larvae (primarily milkweeds [Asclepias spp.]); adult nectar sources (i.e., flowering plants); and sites for roosting, thermoregulation, mating, hibernation, and predator escape. Additionally, monarch butterfly requires conditions and resources for initiating and completing migration both to and from winter roosting areas. Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Not expected to occur: This species may forage on the project site; however, dense, evergreen tree groves suitable for monarch overwintering are not present on the project site and milkweed host plants for egg laying and larval development are also absent; therefore, this species would not be present in its sensitive life phases.		
Reptiles and Amphibians		•			
Foothill yellow-legged frog (North Coast DPS) Rana boylii pop. 1	_	SSC	_	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying. Need at least 15 weeks to attain metamorphosis.	May occur: Suitable habitat for this species (streams) is present along McDaniel Slough.

Name	Federal Status ¹	State Status ¹	CRPR ¹	Habitat	Potential to Occur in the Project Area
Northern red-legged frog Rana aurora	_	SSC	_	Humid forests, woodlands, grasslands, and streamsides in northwestern California, usually near dense riparian cover. Generally near permanent water, but can be found far from water, in damp woods and meadows, during non-breeding season.	May occur: Suitable habitat for this species (streams) is present along McDaniel Slough and the pond, located approximately 350 feet west of the project site.
Northwestern pond turtle Actinemys marmorata	FPL	SSC	_	Ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	May occur. Northwestern pond turtle may be present in the pond approximately 350 feet west of the project site or in McDaniel Slough. Pond turtles dispersing overland or seeking egg-laying habitat may traverse the project site.
Birds					
American peregrine falcon Falco peregrinus anatum	FD	SD	_	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	May occur. American peregrine falcon may nest on human-made structures in the vicinity of the project site.
Bald eagle Haliaeetus leucocephalus	FD	SE, FP	_	Lower montane coniferous forest, old growth. Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	May occur. McDaniel Slough is a fish-bearing stream, and large trees adjacent to the stream may have the potential to support nesting bald eagle.
Northern harrier Circus hudsonius	_	SSC	_	Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	May occur. Habitat suitable for northern harrier foraging, nesting, and dispersal is present in the vicinity of the project site.
Purple martin Progne subis	_	SSC	_	Require cavities for nesting in areas with low canopy cover, often near water. Require abundant aerial insect prey, especially dragonflies. May nest in tree cavities, under bridges, in utility poles, in lava tubes, and occasionally in buildings.	May occur. Habitat suitable for purple martin nesting, foraging, and dispersal may be present in the riparian areas along McDaniel Slough.
White-tailed kite Elanus leucurus Cismontane woodland, marsh and swamp, riparian woodland, valley and foothill grassland, and wetlands. Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.		Known to occur. White-tailed kites were seen copulating during the February 2024 site visit, which indicates that they are likely nesting in the vicinity of the project site. Habitat suitable for white-tailed kite foraging, nesting, and dispersal is present in the vicinity of the project site.			
Yellow-breasted chat Icteria virens	_	SSC	_	Riparian forest, riparian scrub, riparian woodland. Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 feet of ground.	May occur. This species has been documented in McDaniels Slough near the intersection with Foster Ave (eBird 2024), and habitat suitable for this species' nesting is present in the riparian area along McDaniel Slough.

Name	Federal Status ¹	State Status ¹	CRPR ¹	Habitat	Potential to Occur in the Project Area
Yellow warbler Setophaga petechia	Riparian forest, riparian scrub, riparian woodland. Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants		May occur: This species has been documented frequently in McDaniel Slough near the intersection with Foster Ave and throughout the Cal Poly Humboldt campus (eBird 2024), and habitat suitable for this species' nesting is present in the riparian area along McDaniel Slough. Habitat suitable for yellow warbler is present along McDaniel Slough.		
Fish	ı		1		
from Agua Hedionda Lagoon, San Diego Count the mouth of the Smith River. Found in shallow		lagoons and lower stream reaches, they need still but	Not expected to occur: Tidewater goby has been documented in Humboldt Bay (CNDDB 2024) but the portion of McDaniel slough does in the project area does not contain brackish water suitable for this species.		
Chinook salmon - California coastal ESU <i>Oncorhynchus</i> <i>tshawytscha</i> pop. 17	FT		_	Sacramento/San Joaquin flowing waters. Federal listing refers to wild spawned, coastal, spring and fall runs between Redwood Cr, Humboldt Co and Russian River, Sonoma Co	May occur: Suitable habitat for this species is present in McDaniel Slough.
Chinook salmon - upper Klamath and Trinity Rivers ESU <i>Oncorhynchus</i> tshawytscha pop. 30	FC	ST, SSC	_	Klamath/North coast flowing waters. Spring-run chinook in the Trinity River and the Klamath River upstream of the mouth of the Trinity River. Major limiting factor for juvenile chinook salmon is temperature, which strongly effects growth and survival.	Not expected to occur: The project site is outside of the current known range of the species.
Coast cutthroat trout Oncorhynchus clarkii clarkii		SSC	_	Klamath/North coast flowing waters. Small coastal streams from the Eel River to the Oregon border. Small, low gradient coastal streams and estuaries. Need shaded streams with water temperatures less than 18C, and small gravel for spawning	Known to occur: Suitable habitat for this species is present in McDaniel Slough, and this species is known to occur in the area (Cal Poly Humboldt 2007).
California ESU Oncorhynchus kisutch pop. FT ST — listing refers to populations between Cape Blanc Oregon and Punta Gorda, Humboldt County, California. State listing refers to populations between Cape Blanc Oregon and Punta Gorda, Humboldt County, California.		Sacramento/San Joaquin flowing waters. Federal listing refers to populations between Cape Blanco,	May occur: Suitable habitat for this species is present in McDaniel Slough.		
Eulachon Thaleichthys pacificus	Klamath/North coast flowing waters. Found in Klamath River, Mad River, Redwood Creek and in small numbers in Smith River and Humboldt Bay		May occur: Suitable habitat for this species is present in McDaniel Slough.		

Name	Federal Status ¹	State Status ¹	CRPR ¹	Habitat	Potential to Occur in the Project Area
Green sturgeon - southern DPS Acipenser medirostris pop. 1	FT	_	_	Aquatic, estuary, marine bay, Sacramento/San Joaquin flowing waters Spawning site fidelity. Spawns in the Sacramento, Feather and Yuba Rivers. Presence in upper Stanislaus and San Joaquin Rivers may indicate spawning. Non-spawning adults occupy marine/estuarine waters. Delta Estuary is important for rearing juveniles. Spawning occurs primarily in cool (11–15 C) sections of mainstem rivers in deep pools (25–30 feet) with substrate containing small to medium sized sand, gravel, cobble, or boulder.	Not expected to occur: The portion of McDaniel Slough in the project area is not deep enough and does not have the appropriate bed substrate (i.e., it is muddy with no sand, gravels, cobbles, or boulders) for spawning and non-spawning.
Pacific lamprey Entosphenus tridentatus		SSC	Obispo County; however, regular runs are in Santa th		May occur: Suitable habitat for this species is present in McDaniel Slough.
Steelhead - northern California DPS summer-run Oncorhynchus mykiss irideus pop. 48	FT	SE	_	Naturally spawning population of the stream- maturing summer-run ecotype. Favor cool, clear, fast-flowing riffles, ample riparian cover, and undercut banks.	May occur: Suitable habitat for this species is present in McDaniel Slough.
Steelhead - northern California DPS winter-run Oncorhynchus mykiss irideus pop. 49		_	_	From Redwood Creek watershed south to and inclusive of Gualala River watershed. Distribution throughout range. Adults require high flows of 18–20 cm for passage and loose gravels at pool tails for redd construction. Juveniles favor areas with cool (10-17 C), clear, fast-flowing riffles, ample riparian cover, undercut banks and diverse prey.	May occur: Suitable habitat for this species is present in McDaniel Slough.
Western brook lamprey Lampetra richardsoni	SSC — and pools, while adults inhabit large coastal rivers		May occur: Suitable habitat for this species is present in McDaniel Slough.		
longfin smelt Spirinchus thaleichthys FPL ST Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefers salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater.		Not expected to occur. The Project site does not support open estuary habitat suitable for longfin smelt.			

Notes: General references: Unless otherwise noted all habitat and distribution data provided by CNDDB.

CNDDB = California Natural Diversity Database; DPS=distinct population segment; ESU=evolutionarily significant unit;

Legal Status Definitions

Federal:

FE Endangered (legally protected)

FT Threatened (legally protected)

FPL Federally Proposed for listing (no formal protection other than CEQA consideration)

State:

SE Endangered (legally protected)
ST Threatened (legally protected)

FP Fully protected (legally protected)

SSC Species of special concern (no formal protection other than CEQA consideration)

Source: CNDDB 2024; USFWS 2024.

California Rare Plant Ranks (CRPR):

- 1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA).
- 2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA).

CRPR Threat Ranks:

- 0.1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat).
- 0.2 Moderately threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat).
- 0.3 Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

3.4.2 Discussion

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 the US Fish and Wildlife Service?

Less than significant impact with mitigation incorporated. The project involves grading and paving a portion of the project site as well as installation of a bioretention basin and outfall to McDaniel Slough. This ground disturbance has the potential to affect special-status species that occupy the project site. The potential impacts on special-status plants, fish, reptiles, amphibians, and birds are described below.

Special-Status Plant Species

Seven special-status plant species could potentially occur in wetland and riparian habitats along McDaniel Slough: seaside bittercress, Lyngbye's sedge, northern meadow sedge, coast fawn lily, minute pocket moss, crinkled rag lichen, and cylindrical trichodon. Two of these species also have potential to occur in the seasonal and freshwater emergent wetlands along Foster Avenue: Lyngbye's sedge, and northern meadow sedge. Work activities in or adjacent to wetland features or adjacent to McDaniel Slough could cause adverse impacts to individual special-status plants through construction personnel or equipment directly removing them or unintentionally trampling individuals or otherwise degrading habitat. This impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.3-1: Conduct Biological Resources Environmental Awareness Training

Before any work occurs, including equipment staging, all construction personnel shall participate in a biological resources environmental awareness training regarding special-status species and sensitive habitats such as riparian and wetland areas present in the project site. If new construction personnel are added to the project, they must receive the training before starting work. As part of the training, an environmental awareness handout shall be provided to all personnel that describes and illustrates sensitive resources to be avoided during project construction.

Mitigation Measure 3.3-2: Conduct Special-Status Plant Surveys

Prior to the commencement of project-related clearing, grading, or construction activities within the riparian habitat associated with McDaniel Slough and the wetlands north of Foster Avenue, a qualified botanist shall conduct botanical surveys of these habitats during the blooming periods or during appropriate developmental periods that are necessary to identify the potentially occurring special-status plants. Populations of special-status plants, if any, shall be identified and mapped. A report and map shall be prepared following the surveys to document the results. If special-status plants are found to be present, the botanist shall determine appropriate buffer zones within which no construction activity shall occur. Areas containing special-status plants shall be flagged for avoidance before implementing construction activities that result in ground disturbance or vegetation removal.

If areas containing special-status plant species cannot be avoided by project activities, CSU Humboldt will consult with CDFW before commencing clearing, grading, and construction activities to prepare a Compensatory Mitigation Plan. The Compensatory Mitigation Plan shall include mitigation measures for the population(s) to be directly affected. Possible mitigation for impacts to special-status plant species can include implementation of a program to transplant, salvage, cultivate, or re-establish the species at suitable sites (if feasible), purchase of mitigation credits from a CDFW-approved conservation or mitigation bank in sufficient quantities to offset the loss of occupied habitat, or through an in-lieu fee program, if available. The actual level of mitigation may vary depending on the sensitivity of the affected species, its prevalence in the area, and the current state of knowledge about overall population trends and threats to its survival. The final mitigation strategy for directly affected plant species shall be determined with input from CDFW through the mitigation plan approval process.

If relocation efforts are part of the Compensatory Mitigation Plan, the plan will include details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, success criteria, and remedial action responsibilities should the initial effort fail to meet long-term monitoring requirements. The following performance standards will be applied for relocation:

- the extent of occupied area will be substantially similar to the affected occupied habitat and will be suitable for self-producing populations. Re-located/re-established populations will be considered suitable for self-producing when:
- habitat conditions allow for plants to reestablish annually for a minimum of 5 years with no human intervention, such as supplemental seeding; and
- reestablished habitats contain an occupied area comparable to existing occupied habitat areas in similar habitat types in the region.

If preservation of existing populations or creation of new populations is part of the mitigation plan, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands and actions (e.g., the number and type of credits, location of mitigation bank or easement, restoration or enhancement actions), parties responsible for the long-term management of the land, and the legal and funding mechanisms (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity.

If mitigation includes dedication of conservation easements, purchase of mitigation credits, or other off-site conservation measures, the details of these measures will be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, funding assurances, and success criteria such as those listed above and other details, as appropriate to target the preservation of long term viable populations.

If mitigation includes restoring or enhancing habitat within the project site or outside of the project site, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of establishing self-sustaining populations has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored habitat.

Mitigation Measure 3.3-3: Install Temporary Fencing to Protect Environmentally Sensitive Habitat Areas

Temporary fencing shall be placed along the boundary of the work areas to avoid and protect environmentally sensitive areas during construction activities. Environmentally sensitive areas in the project site include riparian forest habitat associated with McDaniel Slough, wetlands, and habitat for special-status species. All environmentally sensitive habitat areas shall be fenced off to the maximum extent feasible outside of the construction zone for development of the retention basin and ingress/egress improvements to the project site. Fencing must be installed prior to the initiation of any vegetation removal, equipment staging, construction, or other project activity. Special-status species habitat identified during pre-activity surveys will be flagged for avoidance if feasible. Fencing will consist of temporary construction barrier fencing or silt fencing and be of sufficient height to prevent construction personnel and equipment from entering any environmentally sensitive areas. The fencing shall be checked regularly and maintained until all construction is complete.

Significance After Mitigation

With implementation of Mitigation Measures 3.3-1 through 3.3-3 potential impacts to special-status plant species would be reduced to a **less than significant** level because Mitigation Measure 3.3-1 would require that all construction personnel undergo environmental awareness training, which would reduce the potential for unintended impacts on all special-status plants and wildlife species with potential to occur. Pursuant to Mitigation Measure 3.3-2, a qualified biologist will conduct surveys for special-status plant species. Finally, pursuant to Mitigation Measure 3.3-4, if special-status plants are found during surveys, their occupied habitat would be fenced for avoidance or a Compensatory Mitigation Plan approved by CDFW would be implemented to offset any unavoidable loss of special-status plants.

Special-Status Wildlife Species: Fish Species

Eight special-status fish species have potential to occur in the stream channel of McDaniel Slough: coast cutthroat trout, Coho salmon— southern Oregon / northern California evolutionarily significant unit (ESU), eulachon, green sturgeon— southern distinct population segment (DPS), Pacific lamprey, steelhead— northern California DPS summer-run, steelhead— northern California DPS winter-run, and western brook lamprey.

Construction of impervious surfaces (e.g., parking lot) adjacent to McDaniel slough could increase stormwater runoff volumes and velocities entering McDaniel Slough could lead to contamination of stormwater flows and potential degradation of downstream surface water quality and fish habitat. These potential factors could affect habitat quality for special-status fish species downstream of the project site; however, as described in Section 3.10, "Hydrology and Water Quality," the project would be required to comply with State Water Resources Control Board (SWRCB) policies and permits, including a National Pollutant Discharge Elimination System (NPDES) Statewide construction general permit for stormwater runoff (Order WQ-2022-0057-DWQ and NPDES No. CAS000002 [Construction General Permit]), and implement stormwater best management practices (BMPs) to prevent pollutants from entering surface waters. Additionally, site design includes on-site management of stormwater through low impact development (LID) measures including soil quality improvement and maintenance, tree planting and preservation, vegetated swales, permeable asphalt, a bioretention basin, and a 100-foot stream setback. These improvements would reduce the volume and rate of runoff and provide for greater infiltration, evaporation, and runoff quality treatment without violating any water quality standards or waste discharge requirements. These existing protections and site design features would reduce the potential for development within the project site to affect downstream fish habitat.

As part of the storm drain detention facilities, an outfall would be installed that would drain to McDaniel Slough on occasion to avoid ponding on this site. Because use of the outfall would be limited to large rain events, seasonal changes in flow would be substantially similar to the existing conditions (i.e., the project would not affect the natural range of variation for flow rate and temperature). Thus, because runoff to McDaniel Slough would be subject to the Construction General Permit during development and would not substantially change from the existing conditions during operation of the project, potential impacts to fisheries would be **less than significant**, and no mitigation is required.

Special-Status Wildlife Species: Reptiles and Amphibians

Three special-status reptile and amphibian species have potential to occur in the project site: Foothill yellow-legged frog (North Coast DPS), northern red-legged frog, and northwestern pond turtle. Foothill yellow-legged frog may occupy the stream channel and the area immediately adjacent to the wetted portion of McDaniel Slough. Northern red-legged frog and northwestern pond turtle may breed in McDaniel Slough or in the pond 350 feet west of the project site, on the adjacent property. Northern red-legged frogs and northwestern pond turtles are semi-aquatic and may move overland to breed, disperse, forage, or may estivate underground in uplands during the summer or winter to seek shelter from dry or cold weather. The pond west of the project site, McDaniel Slough, and the freshwater emergent wetlands and seasonal wetlands along Foster Avenue could also serve as temporary habitat and movement corridors for these species. Portions of these wetlands would be filled to improve access to the parking lot from Foster Ave. These species may also move overland across the grassland area into the proposed project site, especially during wet weather conditions. If northwestern pond turtle or northern red-legged frog are present on the project site during project activities, then ground-disturbance, staging, and other construction activities associated with the project could result in direct mortality to individuals. Frogs and turtles may be crushed by workers or equipment, individuals in nests or sheltering underground may be injured or killed, and individual animals may become trapped in pipes or trenches, also resulting in death. This impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.3-1: Conduct Biological Resources Environmental Awareness Training (described above)

Mitigation Measure 3.3-3: Install Temporary Fencing to Protect Environmentally Sensitive Habitat Areas (described above)

Mitigation Measure 3.3-4: Avoid Disturbance of Special-Status Reptiles and Amphibians

The University shall impose the following conditions prior to, and during, construction:

- Safe relocation of special-status reptiles and amphibians: If an individual foothill yellow-legged frog, northern red-legged frog, or northwestern pond turtle is observed at any time before, during, or after construction activities, a qualified biologist, with approval from CDFW, shall relocate them to the nearest downstream area with suitable aquatic habitat that will not be disturbed by project-related construction activities.
- ▶ Exclusion Fencing: An entrenched, 2-foot-high silt fence (or its equivalent) shall be installed before commencement of construction activities along the inner edge of the project area on the west, north, east, and south sides. A qualified biological monitor shall conduct a pre-construction survey to ensure that trench and fence areas are devoid of burrows and shall be present on-site during installation. The fencing must be trenched into the soil at least four inches below ground and the soil must be compacted against both sides to prevent amphibians and reptiles from passing beneath the fence to enter the work site.
 - Fences shall be inspected by a qualified biologist at least once monthly and on days after any rain event (defined as three or more centimeters of rain in any 24-hour period). Repairs to the fencing must be made within 24 hours of the inspection that first noted a fencing breach, such as a broken stake, hole in the fencing material, material pulled away from a stake, and objects, rain, wind, or sediment that cause fences to sag.
 - Wildlife exclusion fencing may functionally serve as temporary fencing to protect Environmentally Sensitive Habitat Areas, pursuant to Mitigation Measure 3.3-3.
- No plastic monofilament wattles: If wattles are used for erosion control, straw wattles will be used. Plastic monofilament wattles (which can entrap and injure reptiles and amphibians) will not be used on the project site.
- Special-status wildlife observed:
 - If foothill yellow-legged frog, northern red-legged frog or northwestern pond turtle is observed on the project site during survey, a qualified biologist will be present during initial ground disturbance activities and will inspect the project site before initiation of project activities.
 - If foothill yellow-legged frog, northern red-legged frog or northwestern pond turtle is observed on the project site during project activities, project activities will temporarily cease, and the animal will be relocated to the nearest habitat suitable for the species outside of the work area by a qualified biologist. Wildlife will only be relocated by permitted individuals.
- Northwestern pond turtle nest protection: If active nesting areas for pond turtles are identified on the project site, a buffer area of 300 feet shall be established around the nesting site (which may be immediately adjacent to the stream/slough or extend up to 400 feet away from the stream/slough in uplands). These buffers shall be indicated by temporary fencing if construction has or will begin before nesting periods have ended. The nest shall be fenced off and avoided until the eggs hatch or the nest is no longer active, as determined by a qualified biologist. The fenced area shall be open on one side with the opening facing the nearest aquatic habitat so that hatchling turtles can freely travel from the nest to the aquatic habitat. A qualified biologist shall monitor the nest area to ensure that hatchlings do not disperse into the construction area. Monitoring shall occur until the qualified biologist determines that the nest is no longer active. If any hatchlings are observed on the project site, relocation of hatchlings shall occur as described in the encounter protocol below. (The period from egg laying to emergence of hatchlings is normally April to November.)
- ▶ A qualified biologist shall be present during all initial ground-disturbing activities to monitor these activities. If a northwestern pond turtle is encountered, work shall be suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, a qualified biologist shall notify CDFW to determine the appropriate procedures related to relocation, which shall include, but not be limited to, obtaining a valid and applicable CDFW Scientific Collecting Permit. Any worker who inadvertently injures or kills a northwestern pond turtle or who finds a northwestern pond turtle dead, injured, or entrapped must immediately report the incident to the applicant, who must immediately notify CDFW. Entrapped northwestern pond turtles shall be relocated by a qualified biologist with a valid and applicable CDFW Scientific Collecting Permit if approved by CDFW.

- ▶ Because northwestern pond turtle is proposed for listing under ESA, if the species is listed before the completion of project construction activities that could result in injury to or mortality of turtles (i.e., ground disturbance, grading, land conversion), then USACE may be required to consult with USFWS under Section 7 or Section 10 of ESA. USACE is presumed to be the federal action agency because it has jurisdiction over the aquatic habitat on the project site. If it is determined, in consultation with USFWS, that take of this species could occur after implementation of the measures described above, then the project applicant may be required to obtain incidental take authorization through Section 7 consultation pursuant to the ESA. In this case, the project shall not proceed until a Biological Opinion is issued by USFWS.
- ▶ Any conservation measures developed in coordination with USFWS during formal or informal consultation under Section 7 shall supersede the measures listed here.
- Additional measures could include preservation, restoration, or enhancement of habitat on- or off-site; purchase of habitat credits from an agency-approved mitigation/conservation bank; work with a local land trust to preserve land; or any other method acceptable to USFWS.
- ▶ If USFWS determines that listing of northwestern pond turtle under ESA is not warranted, or the species is not listed prior to project completion, then the above measures related to consultation with USFWS are not applicable.

Significance After Mitigation

With implementation of Mitigation Measures 3.3-1, 3.3-3, and 3.3-4, potential impacts to special-status reptiles and amphibian species would be reduced to a **less than significant** level because all construction personnel would undergo environmental awareness training related to special-status reptiles and amphibians pursuant to Mitigation Measure 3.3-1, the environmentally sensitive habitat areas comprised of McDaniel Slough, wetlands, and riparian habitat would be fenced for avoidance where feasible pursuant to Mitigation Measure 3.3-3, and if special-status reptiles and amphibians are present in the project area, disturbance to individuals would be avoided pursuant to Mitigation Measure 3.3-4. Techniques to avoid disturbance include safely relocating special-status reptiles and amphibians if found on site, installation of exclusion fencing to prevent reptiles and amphibians from entering the site, a prohibition on the use of plastic monofilament wattles which can be hazardous to reptiles and amphibians, and protection for northwestern pond turtle nests, if any are identified on site.

Special-Status Wildlife Species: Nesting Birds and Raptors

Six special-status bird species have potential to nest in the vicinity of the project: American peregrine falcon, white-tailed kite, bald eagle, purple martin, yellow-breasted chat, and yellow warbler. Yellow-breasted chat and yellow warbler may forage or disperse through the project area; however, these species nest exclusively in riparian areas, and therefore their nests would be avoided with the establishment of the buffer zone around McDaniel Slough. Tall trees, power poles, and human-made structures surrounding the project site may provide nesting habitat for other protected bird and raptor species. Purple martin may nest in culverts or under bridges near the project site including under Foster Ave at the southwest corner of the project area. Ground disturbance, tree removal, and other construction activities associated with the project could result in noise and direct disturbance to special-status nesting birds and raptors if they are present in the vicinity of project activities. Disturbance to nesting birds could result in nest abandonment by the adults and mortality of chicks and eggs. This impact would be potentially significant, and mitigation is required.

Mitigation Measure 3.3-1: Conduct Biological Resources Environmental Awareness Training (described above)

Mitigation Measure 3.3-5: Avoid Disturbance of Nesting Birds and Raptors

The University shall impose the following conditions prior to, and during, construction:

To minimize the potential for loss of nesting birds, project activities (e.g., tree removal, vegetation clearing, ground disturbance, staging) shall be conducted during the nonbreeding season (September 1-January 31), if feasible. If project activities are conducted during the nonbreeding season, no further mitigation shall be required.

- ▶ Within 14 days before the onset of project activities during the breeding season (February 1 through August 31), a qualified biologist familiar with the ecology of special-status nesting birds and raptors shall conduct preconstruction surveys for active nests of American peregrine falcon, white-tailed kite, bald eagle, purple martin, and other protected birds in accessible areas within 0.25 mile of the project site.
- ▶ If no active nests are found, the qualified biologist shall submit a report documenting the survey methods and results to the University, and no further mitigation shall be required.
- ▶ If active nests are found, impacts on nesting birds and raptors shall be avoided by establishing appropriate nodisturbance buffers around active nest sites. Project activity would not commence within the buffer areas until a qualified biologist has determined that the young have fledged, the nest is no longer active, or reducing the buffer would not likely result in nest abandonment. Buffers shall be determined by a qualified biologist. Factors to be considered for determining buffer size shall include presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and proposed project activities. Generally, buffer sizes would be as follows:

American peregrine falcon and white-tailed kite: 500 feet

Bald eagle: 0.5 mile or 2,640 feet

Other raptors: 100 feetPurple martin: 75 feet

Other passerines (i.e., songbirds): 50 feet

The size of the buffer may be adjusted if a qualified biologist determines that such an adjustment is appropriate and would not be likely to adversely affect the nest. Periodic monitoring of the nest by a qualified biologist during project activities shall be required if the activity has potential to adversely affect the nest or the buffer has been reduced below the distances listed above. Buffers shall be increased if birds within active nests are showing behavioral signs of agitation (e.g., standing up from a brooding position, flying off the nest) during project activities, as determined by the qualified biologist.

Significance After Mitigation

With implementation of Mitigation Measure 3.3-1 and 3.3-5, potential impacts to nesting birds and raptors would be reduced to a **less than significant** level because all construction personnel would undergo environmental awareness training related to nesting birds pursuant to Mitigation Measure 3.3-1, and avoidance of nest disturbance pursuant to Mitigation Measure 3.3-5. To avoid impacts on bird or raptor nests, vegetation removal shall occur outside of the bird nesting season to the extent feasible. Consistent with Fish and Game Code requirements, a specialized survey for nesting special-status bird species will be conducted within 14 days prior to commencing project activities during the breeding season, and appropriately sized no-disturbance buffers would be installed around any active, occupied nests during the nesting season.

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the US 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?

Less than significant impact with mitigation incorporated (b) and c)). As noted above, construction would occur adjacent to McDaniel Slough, which would include installation of an outfall pipe in the bank of McDaniel Slough and would require modifications to existing wetlands located along the project site frontage with Foster Avenue. An aquatic resources delineation was conducted on the project site in 2023, which concluded that freshwater emergent wetlands and seasonal wetlands are present immediately north of and parallel to Foster Avenue. McDaniel Slough

was also identified in the delineation report as a riverine-tidal water of the United States. All waters of the United States are also waters of the state. This project would involve expanding the existing access from Foster Avenue into the parking lot that crosses the freshwater emergent and seasonal wetlands north of Foster Avenue, which would include removing and replacing the existing culverts (Cal Poly Humboldt 2023) Installation of the outfall pipe and culvert and driveway expansion could remove wetland and riparian vegetation, alter wetland hydrology or topography, result in discharge of dredge or fill materials into waters of the United States and state, and impair wetland functions. These disturbances could result in temporary or permanent degradation or loss of wetlands. This impact would be potentially significant.

Permits for work conducted as part of the proposed project within the banks of McDaniel Slough and the wetland north of Foster Avenue would likely be required from CDFW, USACE, and NCRWQCB. In addition, the project would be subject to the NPDES Statewide construction general permit for stormwater runoff (Order WQ 2022-0057–DWQ and NPDES No. CAS000002 [Construction General Permit]), which would comply with state and federal water quality regulations. In compliance with the Construction General Permit, a stormwater pollution prevention plan (SWPPP) would be developed for the Project by a qualified SWPPP professional. The objectives of the SWPPP are to identify pollutant sources that may affect the quality of stormwater associated with construction activity and identify, construct, and implement stormwater pollution prevention measures to reduce pollutants in stormwater discharges during and after construction. Therefore, the SWPPP would include a description of potential pollutants, the management of dredged sediments, and hazardous materials present on the site during construction (including vehicle and equipment fuels). The SWPPP would also include details of how BMPs for sediment and erosion control would be implemented to prevent sediment runoff. Prior to the issuance of grading and building permits by the City of Arcata, the applicant shall provide evidence that the permits have been obtained from CDFW, USACE, and NCRWQCB. This impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.3-1: Conduct Biological Resources Environmental Awareness Training (described above)

Mitigation Measure 3.3-2: Install Temporary Fencing to Protect Environmentally Sensitive Habitat Areas (described above)

Mitigation Measure 3.3-6: Design Project to Avoid and Minimize Disturbances to State and Federally Protected Wetlands and Other Waters; Obtain Authorization for Fill and Required Permits; and Compensate for Unavoidable Degradation or Loss of Wetland Resources

An aquatic resources delineation has already been completed for this project site (Cal Poly Humboldt 2023). Cal Poly Humboldt shall avoid, minimize, and compensate for degradation or loss of waters of the United States and waters of the state by implementing the following measures:

- The Foster Avenue Parking Lot project will be designed to avoid impacts on potential jurisdictional waters where feasible. For any unavoidable fill or alteration of a state or federally protected wetland or other waters, Cal Poly Humboldt shall coordinate with USACE to obtain a CWA Section 404 permit, CDFW to obtain a Lake and Streambed Alteration Agreement, and NCRWQCB to obtain a CWA Section 401 Water Quality Certification. Cal Poly shall comply with all special conditions of the necessary permits.
- ► To support the permit applications, Cal Poly Humboldt shall prepare a habitat mitigation and monitoring plan (HMMP) for inclusion in the permit applications that details how Cal Poly will restore or replace on a "no-net-loss" basis the acreage and function of all wetlands and other waters of the United States and state that would be lost as a result of project implementation. The HMMP will describe compensation ratios for acres filled.
- If mitigation credits are not available, Cal Poly Humboldt shall incorporate on-site, in-kind, permittee-responsible compensatory mitigation to ensure that the aquatic resource functions and values are retained or improved as part of the project. The HMMP shall identify the location(s) where the proposed compensatory mitigation shall be implemented and the type (e.g., creation, restoration, enhancement, preservation) of mitigation that shall be implemented. The HMMP shall include a monitoring protocol, annual performance standards and final success criteria for created or restored habitats, and corrective measures to be applied if performance standards are not met. At a minimum, the HMMP shall include a 5-year maintenance and monitoring program that facilitates the successful completion of the mitigation efforts.

► The HMMP will be designed to result in no net loss of aquatic resource functions. The HMMP may include on-site restoration of affected wetland habitat or the purchase of mitigation credits from a mitigation bank approved by CDFW, USACE, and NCRWQCB. This mitigation requirement may be refined or superseded by the terms specified in permits or agreements obtained from CDFW, USACE, and NCRWQCB.

Significance After Mitigation

With implementation of Mitigation Measures 3.3-1, 3.3-2, and 3.3-6, potential impacts to state or federally protected aquatic resources, riparian habitat, or other sensitive natural community would be reduced to a **less than significant** level because waters will be avoided when feasible, and where fill or alteration of a state or federally protected wetland or other water cannot be avoided, the necessary permits will be obtained, and Cal Poly Humboldt will comply with all special conditions of those permits. Furthermore, Mitigation Measure 3.3-6 requires that an HMMP be established with compensatory mitigation resulting in no-net-loss of wetland functions and area for impacts to jurisdictional wetland areas.

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?

Less than significant impact with mitigation incorporated. The project site does not provide wildlife migratory or nursery habitat. The project does not fall within areas mapped by CDFW's California Essential Habitat Connectivity program as either Essential Connectivity Areas (CDFW 2014a) or a Natural Landscape Block (CDFW 2014b). While the project area is bordered on the west by moderately open agricultural land, there is residential development to the north, east, and south of the project site. Common terrestrial wildlife species may incidentally pass through the project site, but no major wildlife migration routes are in the area and the project site does not serve as a migratory wildlife corridor. Fish species occur within McDaniel Slough; however, construction of the stormwater outfall would occur at the top of bank during the dry season, and thus project construction would not restrict movement of fish and other wildlife using the stream. Implementation of project activities could temporarily disrupt nesting bird behavior in the riparian habitat of McDaniel Slough due to noise and physical disturbance. Additionally, partially aquatic wildlife species such northern red-legged frog, northwestern pond turtle, Pacific chorus frog (Pseudacris regilla), and rough-skinned newt (Taricha granulosa) may incidentally travel overland from the pond west of the project site into the wetlands or riparian habitat associated with McDaniel Slough. If construction activities are underway while partially terrestrial aquatic species, fish species, or riparian nesting bird species are attempting to migrate through or utilize the project area as a nursery site, construction equipment and noise could alter wildlife species behavior or hinder their movement. This impact would be potentially significant.

Mitigation Measure 3.3-1: Conduct Biological Resources Environmental Awareness Training (described above)

Mitigation Measure 3.3-3: Install Temporary Fencing to Protect Environmentally Sensitive Habitat Areas (described above)

Mitigation Measure 3.3-4: Avoid Disturbance of Special-Status Reptiles and Amphibians (described above)

Mitigation Measure 3.3-5: Avoid Disturbance of Nesting Birds and Raptors (described above)

Significance After Mitigation

With implementation of Mitigation Measure 3.3-1, 3.3-3, 3.3-4, and 3.3-5, potential impacts to native fish and wildlife species movement, wildlife corridors, or nursery sites would be reduced to a less than significant level because all construction personnel would undergo environmental awareness training pursuant to Mitigation Measure 3.3-1, and the environmentally sensitive habitat area along McDaniel Slough will be fenced for avoidance where feasible pursuant to Mitigation Measure 3.3-3. Mitigation Measures 3.3-4 and 3.3-5 require surveys for special-status wildlife species, specific avoidance measures to ensure protection of special-status reptiles and amphibians, specific avoidance measures to ensure protection of special-status fish, and specific avoidance measures to ensure protection of nesting birds and raptors. Although measures 3.3-4 and 3.3-5 were developed with special-status species in mind, these measures will incidentally also provide protection for common wildlife species that inhabit similar niches as their

special-status counterparts (i.e., Mitigation Measure 3.3-4, which is designed to provide special-status reptile and amphibian protections for northern red-legged frog and northwestern pond turtle, will incidentally provide protection for chorus frog and rough-skinned newt when implemented because these species inhabit similar niches). Implementation of these measures would reduce impacts on wildlife movement, migration corridors, and nursery habitat to a **less than significant** level.

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

No impact. Because Cal Poly Humboldt, as part of the CSU, is a state entity, it is not subject to local plans, policies, or regulations. Further, landscaping would be provided on-site and existing riparian vegetation would be maintained along Janes Creek, to the extent feasible. Therefore, this impact analysis does not evaluate potential conflicts with local plans, policies, or regulations. There would be no impact, and no mitigation is required

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?

No impact. The project site is not within any adopted habitat conservation plan or natural community conservation plan. Therefore, there would be no impact, and no mitigation is required.

3.5 CULTURAL RESOURCES

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Cultural Resources. ould the project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?				
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?				
c)	Substantially disturb human remains, including those interred outside of formal cemeteries?			\boxtimes	

3.5.1 Environmental Setting

On July 27, 2023, a California Historical Resources Information System records search was conducted by the Northwest Information Center on the campus of California State University, Sonoma, to determine whether precontact archaeological, historic era archaeological, or built-environment historical resources had been previously recorded within the project site, the extent to which the project site has been previously surveyed, and the number and type of cultural resources within a 0.5-mile radius of the project site.

The search found that two previous investigations have occurred within the project site, which together cover 100 percent of the project site. The results also indicated that there are two previously recorded historic era archaeological sites within the project site. P-12-003608 was named the "Ruins of Van De Nor Lumber Mill" which consists of concrete foundations, and P-12-003609 was named the "Arcata Spur of Humboldt Northern Railway" which consists of a railroad grade segment. These two previously recorded resources were recommended not eligible for inclusion in the National Register of Historic Places (NRHP) or the California Register of Historic Resources (CRHR) as they do not appear to meet any of the criteria necessary for listing in either register (Rich 2016).

A pedestrian survey was conducted on September 4, 2023. Foster Avenue was recorded as a built environment and was evaluated against NRHP and CRHR criteria. (Ascent 2024; Appendix C). The two previously recorded historic era archaeological sites were relocated as part of a 2024 pedestrian survey and were deemed to be consistent with observations and description of its original recording (Rich 2016). Available research failed to provide any direct association between the existing road and significant events (NRHP/CRHR Criterion A/1) or people (Criterion B/2). It also does not retain attributes or materials of its original construction and workmanship which indicate that it embodies distinctive characteristics of a type, period, or method of construction. Research has also failed to indicate that the road was the work of a master engineer. As such, the road segment does not appear to meet the requirements for significance under NRHP/CRHR Criterion C/3. Foster Avenue also does not retain the integrity required to answer questions about the past or contain information that cannot be gained in other ways; thus, the road segment is also not significant under NRHP/CRHR Criterion D/4. Therefore, Foster Avenue is not a resource as refined by Section 15064.5.

3.5.2 Discussion

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

No impact. The records search and the pedestrian survey revealed no built-environment (historical) resources within the project site. Foster Avenue is not a resource as defined by Section 15064.5. Therefore, there would be **no impact** on historical resources, and no mitigation is required.

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

Less than significant impact with mitigation incorporated. Resources P-12-003608 and P-12-003606 are historic era archaeological sites that were evaluated and recommended not eligible for the CRHR and NRHP. Consequently, these two archaeological sites are not considered archaeological resources pursuant to Section 15064.5. In addition, the pedestrian survey resulted in no new resources. Nonetheless, project construction could encounter previously undiscovered or unrecorded subsurface archaeological sites and materials during preconstruction or construction-related ground disturbing activities. These activities could damage or destroy previously undiscovered unique archaeological resources. This would be a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 3.5-1 For All Ground-Disturbing Construction Activities, Halt Ground Disturbance Upon Discovery of Subsurface Archaeological Features

In the event that a precontact archeological site (such as any unusual amounts of stone, bone, or shell) or a historic era archaeological site (such as concentrated deposits of bottles or bricks with makers marks, amethyst glass, or other historic refuse), is uncovered during grading or other construction activities, all ground-disturbing activity within 50 feet of the discovery shall be halted until a qualified archaeologist can assess the significance of the find. Cal Poly Humboldt shall be notified of the potential find and a qualified archeologist shall be retained to investigate its significance. If the find is a precontact archeological site, the appropriate Native American group(s) shall be notified. Any previously undiscovered resources found during construction will be recorded on appropriate California Department of Parks and Recreation 523 forms and evaluated for significance under all applicable regulatory criteria. If the archaeologist determines that the find does not meet the CRHR standards of significance for cultural resources, construction may proceed. If the find is determined to be significant by the qualified archaeologist (i.e., because the find is determined to constitute either an historical resource or a unique archaeological resource), the archaeologist shall work with Cal Poly Humboldt to follow accepted professional standards such as further testing for evaluation or data recovery, as necessary. If artifacts are recovered from significant historic archaeological resources, they shall be housed at a qualified curation facility. The results of the identification, evaluation, and/or data recovery program for any unanticipated discoveries shall be presented in a professional-quality report that details all methods and findings, evaluates the nature and significance of the resources, analyzes and interprets the results.

Significance After Mitigation

Implementation of Mitigation Measure 3.4-1 would reduce potential impacts to archaeological resources discovered during project construction activities to a **less than significant** level by requiring preservation options and proper curation if significant artifacts are recovered.

c) Substantially disturb human remains, including those interred outside of formal cemeteries?

Less than significant impact. There are no known past cemeteries or burials on the project site or immediate area. However, because earthmoving activities associated with project construction would occur, there is potential to encounter buried human remains or unknown cemeteries in areas with little or no previous disturbance. California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with

Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.

These statutes require that, if human remains are discovered, potentially damaging ground-disturbing activities in the area of the remains shall be halted immediately, and the Humboldt County coroner shall be notified immediately. If the remains are determined by the coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. Following the coroner's findings, the NAHC-designated Most Likely Descendant and the landowner shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments, if present, are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in PRC Section 5097.94.

Compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097 would provide an opportunity to avoid or minimize the disturbance of human remains, and to appropriately treat any remains that are discovered. Therefore, this impact would be **less than significant**, and no mitigation is required.

3.6 ENERGY

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Energy. ould 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?			\boxtimes	

3.6.1 Environmental Setting

ENERGY TYPES AND SOURCES

California relies on a regional power system comprised of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. One-third of energy commodities consumed in California is natural gas. In 2014, approximately 35 percent of natural gas consumed in the State was used to generate electricity. Residential land uses represented approximately 17 percent of California's natural gas consumption with the balance consumed by the industrial, resource extraction, and commercial sectors (EIA 2017). Power plants in California generate approximately 70 percent of the in-State electricity demand, with large hydroelectric in the Pacific Northwest and power plants in the Southwestern US generating the remaining electricity (CEC 2017). The contribution of in- and out-of-State power plants depends on the precipitation that occurred in the previous year, the corresponding amount of hydroelectric power that is available, and other factors.

The Pacific Gas and Electric Company (PG&E) provides both natural gas and electricity to customers in the City of Arcata and to Cal Poly Humboldt. PG&E's 2021 grid mix includes 50 percent renewable, 39 percent nuclear, 4 percent large hydroelectric, and 7 percent natural gas (PG&E 2022). PG&E owns and operates overhead electric transmission and electric distribution facilities as well as gas transmission facilities throughout the City of Arcata.

Alternative Fuels

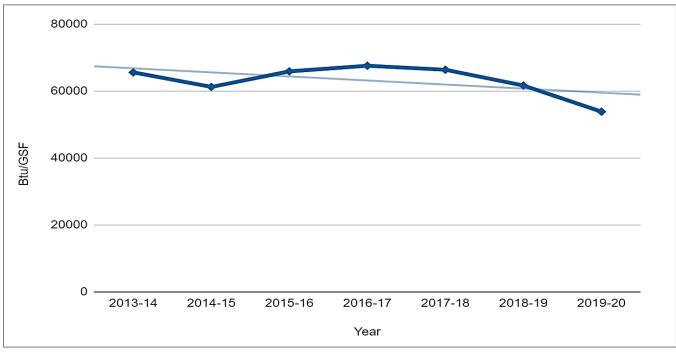
A variety of alternative fuels are used to reduce demand for petroleum-based fuels. The use of these fuels is encouraged and required through various Statewide regulations and plans (e.g., Low Carbon Fuel Standard, Climate Change Scoping Plan). Conventional gasoline and diesel may be replaced (depending on the capability of the vehicle) with many transportation fuels, including:

- biodiesel,
- electricity,
- ▶ ethanol (E-10 and E-85),
- hydrogen,
- natural gas (methane in the form of compressed and liquefied natural gas),
- propane,
- renewable diesel (including biomass-to-liquid),
- synthetic fuels, and
- gas-to-liquid and coal-to-liquid fuels.

California has a growing number of alternative fuel vehicles through the joint efforts of CEC, CARB, local air districts, federal government, transit agencies, utilities, and other public and private entities. As of September 2022, California contained 15,200 alternative fueling stations (US Department of Energy 2022).

CAMPUS ENERGY FACILITIES AND SERVICES

As part of its implementation of CAP 2.0, Cal Poly Humboldt has reduced the overall energy demand of the campus. Figure 3.5-1 shows this reduction in energy demand relative to the gross square footage of the campus, where building gross square footage increased by 5 percent, while overall energy use (natural gas and electricity) declined by 18 percent in the same period, with current demand being approximately 5,600 British Thermal Units (Btu) per gross square foot (GSF), according to the last recorded data point (2019-2020) (Cal Poly Humboldt 2021).



Source: Cal Poly Humboldt 2021.

Figure 3.5-1 Historical Campus Energy Demand

3.6.2 Discussion

a) 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. Energy would be required to construct, operate, and maintain construction equipment and to produce and transport construction materials associated with construction of the proposed project. The proposed project would be constructed over an approximately 6-month period starting in Winter 2025 and concluding in Spring 2026. The one-time energy expenditure required to construct the parking lot and infrastructure associated with the project would be nonrecoverable. Most energy consumption would result from operation of construction equipment and vehicle trips associated with commutes by construction workers and haul trucks transporting materials to and from the project site. See Table 3.6-1 for an estimate of fuel needed for construction activities.

As shown in Table 3.6-1, construction of the project would result in the consumption of approximately 2,155 gallons of diesel fuel and 9,880 gallons of gasoline.

Table 3.6-1 Construction Energy Consumption

Phase	Diesel (Gallons)	Gasoline (Gallons)
Worker Commute	_	9,880
Haul Trucks	2,155	_

Notes: Gasoline gallons include on-road gallons from worker trips. Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips. Source: Calculations by Ascent in 2024. See Appendix B.

Operation of the project would result in the consumption of electricity for lighting. The year 2026 was considered the first year of operation of the parking lot, as it would be the first full calendar year following the conclusion of construction activities of the parking lot itself. No natural gas would be consumed, and all power needs would be met through electrical connections. The estimated electricity demand from operation of the project is shown in Table 3.6-2.

As shown in Table 3.6-2, operation of the project would result in the consumption of approximately 72,807 kilowatt hours per year of electricity.

Table 3.6-2 Operational Energy Consumption for Buildout Year (2026)

Energy Type	Energy Consumption	Units
Electricity Demand	72,807	kWh/year

Notes: kWh/year = kilowatt-hours per year.

Source: Calculations by Ascent in 2022. See Appendix B.

Transportation-related fuel consumption was estimated using the estimated daily VMT provided in the transportation analysis prepared for the project and estimated miles per gallon per fuel type for Humboldt County from the CARB mobile source emissions inventory EMFAC database. These fuel calculations are based on fuel economy and consumption rates during the expected first year of operation (i.e., 2026). State and federal regulations regarding fuel efficiency standards for vehicles in California are designed to reduce wasteful, inefficient and unnecessary use of energy for transportation. Over time, these regulations and efficiency standards will reduce fuel consumption from fossil fuels.

As shown in Table 3.6-3, operation of the project would result in the consumption of approximately 3,806 gallons of gasoline and 815 gallons of diesel fuel per year.

Table 3.6-3 Operational Transportation Fuel Consumption

Phase	Diesel (Gallons Per Year)	Gasoline (Gallons Per Year)		
Vehicle Trips	815	3,806		

Notes: Gasoline and diesel gallons based on EMFAC assumption for Humboldt County in 2027.

Source: Calculations by Ascent Environmental in 2024. See Appendix B.

The project would increase energy consumption for temporary construction activities related to vehicle use and material transport. However, construction activities would be temporary and would not increase long-term energy or fuel demand. Construction activities would consume the necessary amount of fuel/energy to complete work in an efficient and timely manner. Once operational, the project would increase transportation and building energy, the project would not consume natural gas, and the project would include various features that reduce vehicle trips and promote energy conservation. On-site circulation provides a series of interconnected pedestrian and bicycle paths throughout the development to promote multimodal transportation choices. The project would provide additional parking for the campus community with an additional 212 stalls. Furthermore, implementation of the project would result in an overall decrease in fossil fuel consumption compared to existing conditions, as the project would reduce VMT by 8,981 (Appendix A).

According to Appendix F of the State CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall per capita energy consumption, decreasing reliance on oil, and increasing reliance on renewable energy sources. As stated above, the project would be all-electric and would not consume natural gas, and would reduce VMT compared to existing conditions. The project would not develop uses or involve activities that would conflict with goals of decreasing per capita energy consumption, reliance on oil (petroleum), or increasing uses of renewable energy sources, or that would result in wasteful, inefficient, or unnecessary consumption of energy. This impact would be **less than significant**, and no mitigation is required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than significant impact. Energy plans applicable to the project include the Cal Poly Humboldt Climate Action Plan 2.0 (CAP), the 2022 Scoping Plan, and the CSU Sustainability Policy. The following discussion describes these plans in further detail and provides an analysis of the proposed project's consistency with each of these plans.

Consistency with Cal Poly Humboldt Climate Action Plan 2.0

In the absence of adopted thresholds by NCUAQMD or Cal Poly Humboldt, the goals of the CAP are used in place of numerical thresholds to qualitatively assess the project's consistency with the applicable plans and policies. Table 3.6-4 below provides a comparison between the applicable goals and guiding policies identified in the CAP and the design features of the project.

Table 3.6-4 Comparison of Cal Poly Humboldt Climate Action Plan 2.0 with the Project

Cal Poly Humboldt Climate Action Plan 2.0	Project Consistency				
BEF GOAL 1: All buildings owned/operated by Cal Poly Humboldt will generate zero direct emissions by 2045.	Consistent. The project would support this goal through all-electric design.				
BEF GOAL 2 : Build resilience into campus buildings and infrastructure to adapt to, and continue to provide functionality during, climate change impacts	Consistent. The project would comply with building code and CSU Sustainability Policy requirements and would not include natural gas. The project would not impede the implementation of measures consistent with this goal.				
BEF GOAL 3: Zero emissions fleet by 2045	N/A. The project would not impede the implementation of measures consistent with this goal.				
TRA GOAL 1: Reduce commute emissions 50% below 2015 levels by 2030, and to zero by 2045	Consistent. The project would reduce VMT by 8,981 compared to baseline conditions.				
TRA GOAL 2: Reduce business air travel emissions by 50% of 2015 levels by 2030 Strategy	N/A. The project would not impede the implementation of measures consistent with this goal.				
SWP GOAL 1: Cal Poly Humboldt is a zero-waste campus by 2045	N/A. The project would not impede the implementation of measures consistent with this goal.				
SWP GOAL 2: Reduce non-hazardous construction and demolition waste going to the landfill	Consistent. A portion of material being sent off-site to a landfill or other waste facility, consistent with construction waste recycling requirements.				
SWP GOAL 3: By 2030 prioritize the procurement and use of materials, goods, and supplies that are recycled, reused, repurposed or returned at the end of life.	N/A. The project would not impede the implementation of measures consistent with this goal.				
SWP GOAL 4: Reduce the embodied carbon of specified construction materials by 50% of 2022 levels by 2030	Consistent. The project would adhere to building code and CSU Sustainability Policy requirements related to the manner in which construction is conducted.				
CSO GOAL 1: By 2045, any remaining GHG emissions are mitigated through sequestration and carbon offset programs or purchases	N/A. The project would not impede the implementation of measures consistent with this goal.				
A&R GOAL 1: Further integrate sustainability into the curriculum	N/A. The project would not impede the implementation of measures consistent with this goal.				
A&R GOAL 2: Foster cross-disciplinary research and creative activities in sustainability	N/A. The project would not impede the implementation of measures consistent with this goal.				
A&R GOAL 3: Firmly and publicly establish Cal Poly Humboldt as a hub for sustainability innovation, curriculum and research	N/A. The project would not impede the implementation of measures consistent with this goal.				
RES GOAL 1: Develop a campus and community that can withstand and thrive through climate change-driven disruptions	Consistent. The project would comply with building code and CSU Sustainability Policy requirements and would not include natural gas. The project would not impede the implementation of measures consistent with this goal.				

Based on the comparison in Table 3.6-4 above, it can be determined that the project would be consistent with the goals of the CAP and would therefore not impede its implementation.

Consistency with CARB's Scoping Plan

The 2022 Scoping Plan lays out the framework for achieving the 85 percent reduction in 1990 emissions goal by 2045 and progress toward additional reductions. Appendix D of the 2022 Scoping Plan includes detailed greenhouse gas (GHG) reduction measures and local actions that land use development projects can implement to support the Statewide goal. For CEQA analyses, the 2022 Scoping Plan states that projects should implement feasible mitigation, preferably measures that can be implemented on-site. The project would include on-site GHG emission reduction features including all-electric project design, energy-efficient lighting, and the reduction of fossil fuel consumption through a reduction in baseline VMT. As a result, the project would contribute to the State's GHG reduction goal and would therefore be considered consistent with the 2022 Scoping Plan.

Consistency with CSU Sustainability Policy

The CSU Sustainability Policy aims to reduce the environmental impact of construction and operation of buildings and to integrate sustainability into operational practices across the system. This includes the goals of reducing systemwide facility carbon emissions to 40 percent below 1990 levels consistent with Senate Bill (SB) 32, California's Global Warming Solutions Act of 2006 (Health and Safety Code Section 38566, effective January 1, 2017). As a component of further university-development within the CSU system, the project would be required to comply with all policies within the CSU Sustainability Policy. Moreover, the project would not include natural gas utilities on-site. Lastly, the project would reduce fossil fuel consumption compared to projected conditions under the current Master Plan by reducing overall VMT while still providing additional parking for students (see impact b), below, in Section 3.17, "Transportation.") Because of the implementation of the strategies and features listed above, the project would be consistent with the CSU Sustainability Policy.

Summary

The project would align with the energy efficiency and conservation goals of the CAP, 2022 Scoping Plan, and CSU Sustainability Policy. This impact would therefore be **less than significant**, and no mitigation is required.

3.7 GEOLOGY AND SOILS

	ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Geology and Soils. ould 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 California Geological Survey Special Publication 42.)				
	ii) Strong seismic ground shaking?			\boxtimes	
	iii) Seismic-related ground failure, including liquefaction?			\boxtimes	
	iv) Landslides?			\boxtimes	
b)	Result in substantial soil erosion or the loss of topsoil?			\boxtimes	
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, as updated), creating substantial direct or indirect risks to life or property?				
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				

3.7.1 Environmental Setting

The following discussion includes a summary of the *Geotechnical Investigation Report, Proposed Parking Lot, APN 505-161-011, Foster Ave, Arcata, California* (geotechnical report) that was prepared by SHN in 2024 (SHN 2024).

GEOLOGY

The project site is located in the City of Arcata within Humboldt County. Humboldt County is located within the northern portion of California's Coastal Range geomorphic province, which is bordered by the Klamath Mountains

and Great Valley to the east. The Coast Ranges are northwest-trending mountain ranges (2,000 to 4,000, occasionally 6,000 feet elevation above sea level), and valleys. The ranges and valleys trend northwest, subparallel to the San Andreas Fault. The Coast Ranges are composed of thick Mesozoic and Cenozoic sedimentary strata. The northern Coast Ranges are dominated by irregular, knobby, landslide-topography of the Franciscan Complex. The project parcels are located on a broad, coastal alluvial plain at the northern end of Humboldt Bay. The alluvial plain is a result of fluvial deposition from the Mad River and a series of smaller creeks, including McDaniel Slough, which flows along the southeastern edge of the project site. The coastal plain north of Humboldt Bay is commonly referred to as the "Arcata Bottom," and is underlain by an unknown thickness of alluvial sediments. Borings conducted on the alluvial plain have typically encountered less than 100 feet of recent alluvial sediment, but there may be structural or depositional complexities in the subsurface that could influence overall alluvial thickness beneath any particular site (City of Arcata 2019). The site is underlain by Quaternary alluvial sediments, some of which are interpreted to be relatively young (late Holocene age).

SEISMICITY

Coastal northern California is a seismically active region that is susceptible to strong earthquake shaking from a variety of seismic sources. The Cascadia subduction zone is the most significant potential seismic source in the region, capable of producing very large earthquakes greater than magnitude 9. Earthquakes with a magnitude of 8 to 9 are expected to occur about every 300 to 500 years, with the last subduction event occurring in 1700. The project site is located within the Mad River fault zone. The Mad River fault zone consists of a series of northwest-trending, northeast-dipping thrust faults, including (from south to north) the Fickle Hill, Mad River, McKinleyville, and Trinidad faults. Of these, the closest is the Fickle Hill fault, which traverses the southwestern flank of Fickle Hill and through the city of Arcata. The Fickle Hill fault projects toward, but is not expressed across, the Mad River alluvial plain, presumably because the geomorphic evidence of the fault was erased during formation of the Holocene floodplain (City of Arcata 2019). Three fault traces have been mapped and defined based on geomorphic expression through older sediments within the upland portions of Arcata. The traces are mapped as concealed where they project into the Arcata Bottoms, as young sedimentation has presumably buried any evidence of surface rupture. The central trace is included as a potentially active fault within a State of California Special Studies Zone and is approximately 1,000 to 1,500 feet southeast of the project site (SHN 2024). Based on the proximity to active faults, the project site is likely to experience strong seismic ground shaking during the design life of the parking lot. Because the project site is flat and located on a broad, relatively flat alluvial plain, slope stability, landslide, and erosion hazards do not present substantial hazards to people and property.

SOILS

Subsurface studies completed for the project site indicate that up to 4.5 feet of non-engineered fill consisting of a mixture of woody debris and loose to medium dense river-run gravels blanket a large portion of the project site. Poorly drained native soils underlie this non-engineered fill. Native soils, encountered below the fill consist of fine-grained soils (silts and clays), which have a low permeability. Groundwater was observed to be perched on these materials during our site investigation. Field testing indicates that the silty and clayey native soils have a very slow infiltration rate (SHN 2024).

The Arcata Safety Element mapped the site area along the Janes Creek corridor as a Moderate Liquefaction with High Liquefaction zone. The Humboldt County General Plan maps also show the property within an Area of Potential Liquefaction. Geologically, the site is underlain by Quaternary alluvial sediments, some of which are interpreted to be relatively young (late Holocene age). However, based on subsurface studies, much of the shallow soils beneath the site (in the upper 5 feet) consist of stiff silts and clays that are generally not considered liquefiable. Potential liquefaction risk on the site would be limited to a rare, very large earthquake in the saturated sandy layers of soil below the site at depth, the risks to the proposed project are generally considered low.

PALEONTOLOGICAL RESOURCES

The Society of Vertebrate Paleontology (SVP) has established guidelines for the identification, assessment, and mitigation of adverse impacts on nonrenewable paleontological resources (SVP 2010). Most practicing paleontologists in the United States adhere closely to the SVP's assessment, mitigation, and monitoring requirements as outlined in these guidelines, which were approved through a consensus of professional paleontologists and reflect the currently accepted standard practices. Many federal, state, county, and city agencies have either formally or informally adopted the SVP's standard guidelines for the mitigation of adverse construction-related impacts on paleontological resources. The SVP has helped define the value of paleontological resources and, in particular, indicates the following:

- Vertebrate fossils and fossiliferous (fossil-containing) deposits are considered significant nonrenewable paleontological resources and are afforded protection by federal, state, and local environmental laws and quidelines.
- A paleontological resource is considered to be older than recorded history, or 5,000 years before present, and is not to be confused with an archaeological resource.
- ▶ Invertebrate fossils are not significant paleontological resources unless they are present within an assemblage of vertebrate fossils or they provide undiscovered information on the origin and character of the plant species, past climatic conditions, or the age of the rock unit itself.
- A project paleontologist, special interest group, lead agency, or local government can designate certain plant or invertebrate fossils as significant.

In accordance with these principles, the SVP outlined criteria for screening the paleontological potential of rock units and established assessment and mitigation procedures tailored to such potential (SVP 2010). The project site contains Quaternary alluvial sediments, some of which are interpreted to be relatively young (late Holocene age), shallow finegrained and sandy native soils. Although not discussed in the SVP standards, artificial fills, surface soils, and high-grade metamorphic rocks do not contain paleontological resources. While such materials were originally derived from rocks, they have been altered, weathered, or reworked from construction and operation of the previously existing lumber mill, as well as demolition of the lumber mill, such that the discovery of intact fossils would be rare. Therefore, there is little potential for the project site to contain fossils or paleontological resources.

3.7.2 Discussion

- 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 California Geological Survey Special Publication 42.)
- ii) Strong seismic ground shaking?

Less than significant impact (a) i) and a) ii)). Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. The magnitude and nature of fault rupture can vary for different faults or even along different strands of the same fault. Surface rupture can damage or collapse buildings, cause severe damage to roads and pavement structures, and cause failure of overhead as well as underground utilities. According to the Arcata General Plan, the project's parcel is not located within an Alquist-Priolo Zone. The project site lies within the broad Mad River fault zone, which consists of a series of northwest-trending, northeast-dipping thrust faults that extend from Arcata to Trinidad. Within the Mad River fault zone, the fault nearest to the project site is the Fickle Hill fault. The Fickle Hill fault is zoned as an active fault per the State's Alquist-Priolo

Earthquake Fault Zone Act's criteria. The fault is located near the southernmost boundary of the project site; however, the exact location of the fault is currently unknown and is not mapped onto the bottomlands. As such, the project site is not located within an Alquist-Priolo Zone and is not subject to the requirements of the Alquist-Priolo Earthquake Fault Zone Act (City of Arcata 2019).

As discussed in the geotechnical report prepared for the project, due to the proximity of active faults near the project site, the project site is likely to experience strong seismic ground shaking during the design life of the project features. Three fault traces have been mapped and defined based on geomorphic expression through older sediments within the upland portions of Arcata. The traces are mapped as concealed where they project into the Arcata Bottoms, as young sedimentation has presumably buried any evidence of surface rupture. The central trace is included as a potentially active fault within a State of California Special Studies Zone and is approximately 1,000 to 1,500 feet southeast of the project site (SHN 2024). Although the site is flat lying with no indication of surface rupture, it is reasonable to assume that the mapped trace extends beneath the project site. The State of California provides minimum standards for building design through the California Building Code (CBC). The CBC applies to building design and construction in the State and is based on the federal Uniform Building Code (UBC) used widely throughout the country. Specific minimum seismic safety and structural design requirements, including the need to prepare a site-specific geotechnical report with recommendations for incorporation into project design, are set forth in CBC Chapter 16. While the project does not propose structures that would be occupied by residents, the project would still be required to comply with and implement CBC standards for seismic structural design for the project features. Surface rupture is not considered to be a significant hazard for the development proposed for the project, therefore this impact would be less than significant, and no mitigation is required.

iii) Seismic-related ground failure, including liquefaction?

Less than significant impact. As noted above, the project site is located in a highly active seismic region of California. Liquefaction is a phenomenon whereby unconsolidated and/or near-saturated soils lose cohesion and are converted to a fluid state as a result of severe vibratory motion. The relatively rapid loss of soil shear strength during strong earthquake shaking results in temporary, fluid-like behavior of the soil. Soil liquefaction causes ground failure that can damage roads, pipelines, underground cables, and buildings with shallow foundations.

As discussed in the geotechnical report prepared for the project site, the project site is mapped within a liquefaction hazard area (SHN 2024). The Arcata Safety Element mapped the area along the McDaniel Slough corridor as a moderate to high liquefaction zone. Humboldt County General Plan maps also show the property within an area of potential liquefaction. Geologically, the site is underlain by Quaternary alluvial sediments, some of which are interpreted to be relatively young (late Holocene age). Much of the shallow soil beneath the site (in the upper 5 feet) consist of stiff silts and clays that are generally not considered liquefiable. While there may be a hazard of liquefaction associated with a rare, very large earthquake in the saturated sandy layers of soil below the site at depth, the risks to the proposed project are generally considered low (SHN 2024). Additionally, the geotechnical report prepared for the project site contains recommendations for site preparation and grading, wet weather subgrade protection, surface drainage control, and pavement design that would further reduce the potential for hazardous conditions associated with liquefaction (SHN 2024). As discussed above, the requirement to prepare a site-specific geotechnical report with recommendations for incorporation into project design is set forth in CBC Chapter 16. Because the recommendations provided in the geotechnical report for the project would be incorporated into site design, this impact would be less than significant, and no mitigation is required.

iv) Landslides?

Less than significant impact. Slope failures, commonly referred to as landslides, include many phenomena that involve the downslope displacement and movement of materials, either triggered by static (i.e., gravity) or dynamic (i.e., earthquake) forces. Earthquake motions can induce significant horizontal and vertical dynamic stresses in slopes that can trigger failure. Earthquake-induced landslides can occur in areas with steep slopes that are susceptible to strong ground motion during an earthquake.

The project is located on a low relief alluvial flood plain, relatively flat terrain, and is situated at elevations ranging from approximately 25 to 35 feet above sea level. There are no significant natural hill slopes and no cut or fill slopes in the project area. Additionally, the geotechnical report prepared for the project indicates that there are no slope stability hazards associated with the site (SHN 2024). Therefore, this impact would be **less than significant**, and no mitigation is required.

b) Result in substantial soil erosion or the loss of topsoil?

Less than significant impact. As noted above, the project site was previously occupied by a lumber mill. The geotechnical report prepared for the project revealed that fill materials have been placed across most of the property, as was typical of mill sites in the area. Fills logged in subsurface explorations range in thickness from 1 foot to approximately 5 feet, with 2 to 3 feet being typical. Fill materials consist primarily of imported river-run gravels mixed with silt, sand, and lesser amounts of crushed rock. The gravels are well-graded and include cobble-sized rock. In many places, the gravel fills are well compacted from historic equipment and loading. Woody debris (bark, wood chips, and charcoal debris) were found below the surficial gravels or interbedded with the gravels in test pits. The original native topsoil is interpreted to have been partially stripped at the time the woody debris and/or granular fill materials were placed. Below the fill materials, native soils that consist mainly of medium stiff to stiff silts, clayey silts, and sandy silts were encountered. The silts are moderately cohesive with low to medium plasticity. Sandier soils were encountered below the upper silts and clays at depths ranging from 5 to 7 feet below grade (SHN 2024).

The project would be required to obtain a SWPPP, which would include BMPs (e.g., erosion control, site stabilization, etc.) to prevent construction-related silt or debris from affecting areas outside the site boundary, as well as complying with CBC design standards to ensure stability. Additionally, compliance with the site preparation and grading and surface drainage control recommendations, such as removal of debris and any unsuitable material prior to grading and pavement design and adhering to LID features to promote water retention on site, would be required to reduce project impacts related to erosion or loss of topsoil. Thus, the project would have a **less than significant** impact, and no mitigation is required.

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?

Less than significant impact. As described above, the project site is located on a low-relief alluvial floodplain that is not subject to slope related stability hazards. Ground surface elevations within the project site range from approximately 25 to 35 feet above sea level. There are no substantial natural hill slopes and no cut or fill slopes in the project area. The area surrounding the project site is relatively flat land, other than the localized slopes associated with McDaniel Slough. The presence of a low streambank along McDaniel Slough provides opportunity for limited lateral spreading; however, this would likely be limited to riparian areas and would not include the area proposed for developed uses. While the project site is located within a moderate liquefaction zone per the City of Arcata's General Plan, the geotechnical report completed for the project determined that the underlying soils (stiff silts and clays) are generally not considered liquefiable (SHN 2024). As such, the risks to the proposed project are considered low. Regardless, construction of the project would be consistent with recommendations included in the geotechnical report, which include site preparation and grading recommendations such as removal of unsuitable material and review of exposed subsurface areas. These recommendations focus on improvement of the site's foundation, or on preparation of site soils to reduce the liquefaction potential. Therefore, this project would have a less than significant impact, and no mitigation is required.

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

Less than significant impact. Expansive soils possess a "shrink-swell" characteristic. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying. Structural damage may occur over a long period of time due to expansive soils, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils. The project

site is covered with fill from past industrial uses, which primarily consists of gravel and wood waste. The underlying soils are mainly medium stiff to stiff silts, clayey silts, and sandy silts. Subsurface materials at the project site are typically associated with a low risk of adverse effects associated with expansive soils (SHN 2024). Additionally, compliance with CBC standards would assist with improving the site's foundation to reduce impacts from expansive soils. Therefore, this project would have a **less than significant** impact, and no mitigation is required.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No impact. The project would not require the use of septic tanks or alternative wastewater disposal systems. Thus, the project would have **no impact** related to whether the soil is suitable for the use of septic tanks or alternative wastewater disposal systems. No mitigation is required.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than significant impact. The project site contains Quaternary alluvial sediments, some of which are interpreted to be relatively young (late Holocene age), shallow fine-grained and sandy native soils. Although not discussed in the SVP standards, artificial fills, surface soils, and high-grade metamorphic rocks do not contain paleontological resources. While such materials were originally derived from rocks, they have been altered, weathered, or reworked from construction and operation of the previously existing lumber mill, as well as demolition of the lumber mill, such that the discovery of intact fossils is not expected. Therefore, the destruction of a unique paleontological resource or site or unique geological feature is not anticipated with project implementation. Thus, this impact would be less than significant, and no mitigation is required.

3.8 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. Greenhouse Gas Emissions. 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?				

3.8.1 Environmental Setting

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the atmosphere from space. A portion of the radiation is absorbed by the earth's surface, and a smaller portion of this radiation is reflected toward space. The absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. The earth has a much lower temperature than the sun; therefore, the earth emits lower frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs in excess of natural ambient concentrations are found to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic forcing (IPCC 2014: 5).

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas most pollutants with localized air quality effects have relatively short atmospheric lifetimes (approximately 1 day), GHGs have long atmospheric lifetimes (1 year to several thousand years). GHGs persist in the atmosphere long enough to be dispersed around the globe. Although the lifetime of any GHG molecule depends on multiple variables and cannot be determined with any certainty, it is understood that more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused CO₂ emissions, approximately 55 percent are estimated to be sequestered through ocean and land uptake every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO₂ emissions remain stored in the atmosphere (IPCC 2013: 467).

The quantity of GHGs in the atmosphere responsible for climate change is not precisely known, but it is enormous. No single project alone would measurably contribute to an incremental change in the global average temperature or to global or local climates or microclimates. From the standpoint of CEQA, GHG impacts relative to global climate change are inherently cumulative.

GREENHOUSE GAS EMISSION SOURCES

Statewide

As discussed previously, GHG emissions are attributable in large part to human activities. The total GHG inventory for California in 2021 was 381 million metric tons of carbon dioxide equivalent (MTCO₂e) (CARB 2024). Table 3.8-1 summarizes the statewide GHG inventory for California by Scoping Plan sector. As shown, transportation, industry, and electricity generation are the largest GHG emission sectors. Emissions of CO₂ are byproducts of fossil fuel combustion. Methane, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Nitrous oxide is also largely attributable to agricultural practices and soil management. CO₂ sinks, or reservoirs, include vegetation and the ocean, which absorb CO₂ through sequestration and dissolution (CO₂ dissolving into the water), respectively, two of the most common processes for removing CO₂ from the atmosphere.

Table 3.8-1 Statewide GHG Emissions by Economic Sector

Scoping Plan Sector	2021 Emissions (MMTCO₂e)	Percentage
Transportation	145.6	38%
Industrial	73.9	19%
Electricity	62.4	16%
Residential & Commercial	38.8	10%
Agriculture	30.9	8%
High GWP	21.3	6%
Waste	8.4	2%

Notes: MMTCO₂e = million metric tons of carbon dioxide equivalent; GWP = global warming potential.

Source: CARB 2021.

Cal Poly Humboldt

The Cal Poly Humboldt CAP 2.0 contains a GHG inventory which categorizes GHG emissions under four scopes:

- Scope 1: On-site combustion of fossil fuels in equipment owned or operated by Cal Poly Humboldt.
- ▶ Scope 2: Indirect emissions (i.e., emissions at the power plant) from purchased electricity.
- Scope 3: Emissions from related activities and supply chain not under direct control.
- ▶ Scope 4: The embodied carbon footprint of materials.

Table 3.8-2 summarizes Cal Poly Humboldt's GHG emissions by source in 2024.

Table 3.8-2 Cal Poly Humboldt GHG Emissions by Source (2024)

Scope	Source	Total Emissions (MMTCO₂e)	Percent of Total
1	Other On-Campus Stationary	264.7	3%
1	Direct Transportation	3,143.3	36%
2	Purchased Electricity	248.6	3%
3	Faculty Commute	681.0	8%
3	Staff Commute	1,658.1	19%
3	Student Commute	316.5	4%
3	Directly Financed Air Travel	30.6	0%
3	Other Directly Financed Travel	425.1	5%

¹ Total emissions are approximate value based on 2019 total California emissions. Totals may not equal the sum of the numbers because of independent rounding.

Scope	Source	Total Emissions (MMTCO₂e)	Percent of Total
3	Study Abroad Travel	70.3	1%
3	Landfilled Solid Waste	175.3	2%
3	Transmission and Distribution Losses	1,613.5	19%
3	FERA	264.7	3%
	Total	8,626.9	100%

Notes: FERA = fuel and energy related activities; MMTCO₂e = million metric tons of carbon dioxide equivalent.

Source: Cal Poly Humboldt 2025.

EFFECTS OF CLIMATE CHANGE ON THE ENVIRONMENT

According to the Intergovernmental Panel on Climate Change, which was established in 1988 by the World Meteorological Organization and the United Nations Environment Programme, global average temperature will increase by 3.7 to 3.8 degrees Celsius (°C) (6.7 to 8.6 degrees Fahrenheit [°F]) by the end of the century unless additional efforts to reduce GHG emissions are made (IPCC 2014:10). According to CEC, temperatures in California will warm by approximately 2.7°F above 2000 averages by 2050 and by 4.1°F to 8.6°F by 2100, depending on emission levels (CEC 2021).

Other environmental resources could be indirectly affected by the accumulation of GHG emissions and the resulting rise in global average temperature. In recent years, California has been marked by extreme weather and its effects. According to CNRA's *Safeguarding California Plan: 2018 Update*, California experienced the driest 4-year statewide precipitation on record from 2012 through 2015; the warmest years on average in 2014, 2015, and 2016; and the smallest and second smallest Sierra snowpack on record in 2015 and 2014 (CNRA 2018:55). In contrast, the northern Sierra Nevada experienced its wettest year on record during the 2016-2017 water year (CNRA 2018:64). The changes in precipitation exacerbate wildfires throughout California, increasing their frequency, size, and devastation. As temperatures increase, the amount of precipitation falling as rain rather than snow also increases, which could lead to increased flooding because water that would normally be held in the snowpack of the Sierra Nevada and Cascade Range until spring would flow into the Central Valley during winter rainstorm events. This scenario would place more pressure on California's levee/flood control system (CNRA 2018:190–192). Furthermore, in the extreme scenario involving the rapid loss of the Antarctic ice sheet, the sea level along California's coastline could rise up to 10 feet by 2100, which is approximately 30–40 times faster than the sea-level rise experienced over the last century (CNRA 2017:102). Changes in temperature, precipitation patterns, extreme weather events, wildfires, and sea-level rise have the potential to threaten transportation and energy infrastructure and crop production (CNRA 2018:64, 116–117, 127).

Cal-Adapt is a climate change scenario planning tool developed by CEC that downscales global climate model data to local and regional resolution under two emissions scenarios. The Representative Concentration Pathway (RCP) 8.5 scenario represents a business-as-usual future emissions scenario, and the RCP 4.5 scenario represents a future with reduced GHG emissions. According to Cal-Adapt, annual average maximum temperatures in the project area are projected to rise by 4.5°F to 7.4°F by 2099, with the low and high ends of the range reflecting the lower and higher emissions increase scenarios (CEC 2021).

Humboldt County experienced an annual average high temperature of 59.7°F between 1950 and 2004. Under the RCP 4.5 scenario, the county's annual average high temperature is projected to increase by 2.1°F to 61.8°F by 2050 and increase an additional 2.4°F to 64.2°F by 2099 (CEC 2021). Under the RCP 8.5 scenario, the county's annual average high temperature is projected to increase by 2.4°F to 62.1°F by 2050 and increase an additional 5.0°F to 67.1°F by 2099 (CEC 2021).

Humboldt County experienced an average precipitation of 44.4 inches per year between 1950 and 2004. Under the RCP 4.5 scenario, the county is projected to experience an increase of 1.0 inches to 45.4 inches per year by 2050 and increase to 46.2 inches per year by 2099 (CEC 2021). Under the RCP 8.5 scenario, the county is projected to experience an increase of 1.3 inches to 45.7 inches per year by 2050 and increase to 48.8 inches per year by 2099 (CEC 2021).

3.8.2 Discussion

- 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?

Less than significant impact (a) and b)). State CEQA Guidelines give the lead agency the discretion to select the most appropriate tools based on substantial evidence. Neither NCUAQMD nor Cal Poly Humboldt have developed project-specific GHG emissions thresholds. Other agencies throughout the state, including multiple air districts, have adopted numerical thresholds that allow projects to demonstrate consistency with the 2030 statewide GHG reduction target codified by SB 32 (i.e., 40 percent below 1990 levels) and Assembly Bill (AB) 1279, which requires the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter, and to ensure that by 2045, statewide anthropogenic GHG emissions are reduced to at least 85 percent below the 1990 levels. Given that neither NCUAQMD nor Cal Poly Humboldt has developed project-specific GHG emissions thresholds, the assessment of GHG emissions in this analysis is based on the project's level of consistency with the CSU Sustainability Policy and the Cal Poly Humboldt 2022 Scoping Plan and CAP.

Construction of the project would result in approximately 60 MTCO₂e over the construction period. Operation of the project would result in 49 MTCO₂e per year (see Appendix B for detailed assumptions and calculations). Section 3.5 "Energy," above provides an analysis of the proposed project's consistency with the CAP. The analysis in Section 3.5 concludes that project design features such as all-electric design and a reduction of 8,981 VMT compared to baseline conditions. Furthermore, the analysis in Section 3.5 demonstrates the project's consistency with the CSU Sustainability Policy and 2022 Scoping Plan, both of which are intended to reduce per capita GHG emissions through actions such as reducing VMT, increasing energy efficiency and reducing the consumption of fossil fuel. As the policies and goals of these plans are tied to statewide GHG reduction targets, projects consistent with these plans would be considered consistent with the State's GHG reduction goals outlined in SB 32 and AB 1279.

The project would be consistent with the Cal Poly Humboldt CAP 2.0, 2022 Scoping Plan, and the CSU Sustainability Policy due to the various design features of the project which reduce potential GHG emissions in a manner and to a degree which is consistent with the goals and policies of the applicable plans. Therefore, this impact would be **less** than significant, and no mitigation is required.

3.9 HAZARDS AND HAZARDOUS MATERIALS

	ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Hazards and Hazardous Materials. buld 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/or 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 Section 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?				

3.9.1 Environmental Setting

HAZARDOUS MATERIALS

The SWRCB GeoTracker website along with the California Department of Toxic Substances Control's (DTSC) Envirostor website provide a comprehensive list of the facilities and sites identified as meeting the "Cortese List" requirements pursuant to Government Code Section 65962.5. The SWRCB GeoTracker website provides data relating to leaking underground storage tanks and other types of soil and groundwater contamination, along with associated cleanup activities. One site, the Eel River Sawmill leaking underground storage tank cleanup site has been closed since 2001. No other sites are listed from the project site (SWRCB 2024). The DTSC Envirostor website provides data related to hazardous materials spills and clean ups. No active hazardous waste facilities are located within 0.5 miles of the project site (DTSC 2024).

SCHOOLS

There are three schools within ¼-mile of the project site: Six Rivers Charter School High School, located 0.22-mile southeast of the project site; Coastal Grove Charter School, located 0.21-mile southwest of the project site; and Fuente Nueva Chater School, located 0.20 mile west of the project site.

AIRPORTS

The nearest airport, Murray Field Airport, is located 5.2 miles south of the project site. The Arcata/Eureka Airport is located approximately 5.6 miles north of the project site. The project site is outside of any airport influence area.

WILDFIRE AND EMERGENCY PLANS

The City of Arcata's Emergency Operations Plan provides guidance for how to respond and recover from emergences/ disasters and outlines coordination along departments and regional partners (City of Arcata 2021). The Humboldt County Sheriff's Office of Emergency Services (OES), in collaboration with local governments and public safety partners, has established over 300 emergency zones throughout Humboldt County utilizing Genasys (formally known as Zonehaven), an evacuation management platform. Pre-established evacuation Zones help fire, law, and emergency service agencies prepare for, streamline, and reduce confusion around the evacuation process so that roads are clear for those who need to evacuate quickly. By evacuating the most at-risk Zones first, emergency personnel are able to manage the traffic flow and more easily prevent the traffic jams that occur when an entire town or city tries to evacuate all at the same time (Humboldt County 2025).

The project site is located within the Humboldt Bay Area Planning Unit Action Plan, within the Humboldt County Community Wildfire Protection Plan. When wildfires have the potential to become disasters by threatening life and safety, procedures are initiated to support the safe evacuation of people, domestic animals, and livestock from potentially hazardous areas. Evacuation sites may be established in different locations depending on the anticipated path of the wildfire and location of the affected population. The determination for the location of these sites is normally made by the Humboldt County Emergency Operations Center Incident Commander in cooperation with an Incident Management Team. The Humboldt County Sheriff and Emergency Officials employs the Humboldt Alert mass communication system and door-to-door methods to inform residents about the threat and where residents should go to take shelter. Evacuation routes in the Humboldt Bay Area Planning Unit would depend on the location of the community at risk and law enforcement recommendations based on fire behavior, wind patterns, traffic, and ingress of emergency vehicles. Evacuation routes would likely travel either north or south along Highway 101, or east on Highway 299. There are numerous smaller roads connecting residences and neighborhoods to Highway 101 (Humboldt County 2019).

The project site is not located within a zone identified as having moderate, high, or very high fire hazard severity (CAL FIRE 2025).

3.9.2 Discussion

a) 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 the use of hazardous materials, such as fuels, solvents, gasoline, asphalt, and oil. The use and storage of these materials could potentially expose and adversely affect workers, the public, or the environment due to improper handling or use, accident, environmentally unsound disposal methods, fire, explosion, or other emergencies, resulting in adverse health or environmental effects. Project operation would involve the use of a parking lot, shuttle station with bicycle parking, and a bioretention basin and would not involve the use of hazardous materials.

The California Highway Patrol (CHP) and the California Department of Transportation (Caltrans) are responsible for enforcing regulations related to the transportation of hazardous materials on local roadways, and the use of these materials is regulated by DTSC, as outlined in CCR Title 22. Cal Poly Humboldt and its construction contractors would be required to comply with the California Environmental Protection Agency's Unified Program, which protects Californians from hazardous waste and hazardous materials by ensuring consistency throughout the state regarding the implementation of administrative requirements, permits, inspections, and enforcement at the local regulatory level. These regulations are specifically designed to protect the public health and the environment and must be adhered to during project construction and operation. Compliance with applicable regulations would ensure that this impact would be **less than significant**, and no mitigation is required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

Less than significant impact. Project construction would require the limited use of heavy machinery and construction equipment, such as dozers, backhoes, and front-end loaders. The operation of this equipment and machinery could result in a spill or accidental release of hazardous materials, including fuel, engine oil, engine coolant, and lubricants. As described above for threshold "b" under Geology and Soils, construction of the proposed project would require coverage under the SRWCB Construction General Permit. Compliance with these requirements would include preparation of a construction SWPPP, which would specify BMPs to quickly contain and clean up any accidental spills or leaks. Mandatory implementation a construction SWPPP and associated BMPs would prevent an accidental release of hazardous materials to create a substantial hazard to the public or the environment during project construction. Project operation would not require the use or storage of hazardous materials, and therefore, there would be no potential for accidental release. Therefore, impacts related to accidental releases of hazardous materials would be less than significant, and no mitigation is required.

c) 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. One school, the Coastal Grove Charter School, is located within one-quarter mile southwest of the project site. As discussed above, under a) regulations are specifically designed to protect the public health and the environment and must be adhered to during project construction and operation. Compliance with applicable regulations would ensure that this impact would be less than significant, and no mitigation is required.

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?

No impact. The project site is not listed as a hazardous materials site (DTSC 2024; SWRCB 2024). Therefore, there is no potential for project construction to create a substantial hazard to the public or the environment. There would be **no impact**, and no mitigation is required.

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 2 miles of a public airport or public use airport. There would be **no impact**, and no mitigation is required.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No impact. Implementation of the project would not involve modifying existing emergency routes or amending the City's Emergency Operations Plan. As noted in Section 3.17, "Transportation," primary site access would be maintained via Foster Road. Therefore, there would be **no impact** related to impairment or interference of an adopted emergency response or evacuation plan would occur. No mitigation is required

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

Less than significant impact. The project site is not located within a zone identified as having moderate, high, or very high fire hazard severity (CAL FIRE 2025). However, conditions within the project site include vegetation, which may be a fuel to support a fire. In addition, access to the site is not limited by fencing or otherwise restricted; thus, there is potential for human-caused ignition to lead to a wildfire.

The project would involve removal of vegetation within the site to allow for development of a parking lot, shuttle station with bicycle parking, and a bioretention basin. Within these developed areas, fuels would be essentially eliminated. Areas within the project site, outside of the parking lot, would be periodically mowed, thereby reducing fuels. While more people may visit the overall project site to use the parking area, which may contribute to increase ignition sources (e.g., accidental human ignition), because the project would reduce fuels there would not be a significant increase in the risk of loss, injury or death involving wildland fire. This impact would be **less than significant**, and no mitigation is required.

3.10 HYDROLOGY AND WATER QUALITY

	ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Hydrology and Water Quality. ould the project:				
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater 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 substantial on- or offsite erosion or siltation;			\boxtimes	
	ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			\boxtimes	
	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?			\boxtimes	
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			\boxtimes	
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

3.10.1 Environmental Setting

The existing project site is vacant and largely undeveloped with some remnants of a previous mill on the site. Drainage from the site currently ponds or sheet flows to the east or ditches along the southern boundary before discharging to Janes Creek. The majority of the site is not within designated flood area; however, along the eastern edge of the site, associated with Janes Creek, the Federal Emergency Management Agency has identified a regulatory floodway and Flood Zone AE (FEMA 2024).

The project site is not located within a tsunami zone (DOC 2024c); however, because it is located approximately one mile north of Humboldt Bay, there is a potential risk of seiche within the bay during an earthquake.

The North Coast RWQCB is responsible for preparing and implementing the Water Quality Control Plan for the North Coast Region or Basin Plan, adopted in 1998, and most recently updated in June 2018 (NCRWQCB 2018). The Basin Plan identifies the beneficial uses of water bodies and identifies the water quality objectives and standards for waters of the

North Coast Hydrologic Region. Federal and state laws mandate the protection of designated beneficial uses of water bodies. State law defines "beneficial uses" as "domestic; municipal; agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves" (Water Code Section 13050[f]). The NCRWQCB applies the Basin Plan's "tributary rule" and assigns to creeks the beneficial uses designated for the nearest downstream location. It also regulates waste discharges in undesignated streams, so that downstream water quality conditions and beneficial uses are not degraded. As such, these creeks are subject to regulation for the existing designated uses in their receiving water bodies.

The Basin Plan contains specific narrative and numeric water quality objectives for a number of physical properties (e.g., temperature, dissolved oxygen, turbidity, suspended solids); biological constituents (e.g., coliform bacteria); and chemical constituents of concern, including inorganic parameters, trace metals, and organic compounds. Water quality objectives for toxic priority pollutants (i.e., select trace metals and synthetic organic compounds) also are identified in the Basin Plan.

The project does not overlie a groundwater basin subject to a sustainable groundwater management plan.

3.10.2 Discussion

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater 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 substantial on- or offsite erosion or siltation;
- 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?

Less than significant impact (a), b), and c) i-iv)). The project includes development of new drainage infrastructure within the parking area, which would collect runoff for discharge into new drainage ponds toward the eastern edge of the project site for percolation into Janes Creek. Additionally, runoff from the site would continue to flow to the existing ditches along Foster Avenue near the southern boundary of the project site, from where it would drain to Janes Creek.

The project would be subject to the requirements of the SWRCB, including compliance with NPDES Statewide construction general permit for stormwater runoff (Order WQ-2022-0057-DWQ and NPDES No. CAS000002 [Construction General Permit]). Consistent with these requirements, a program containing construction BMPs would be prepared and implemented as part of the SWPPP. Since some of the proposed construction activities would not be restricted to the dry months of the year, erosion control BMPs would be implemented to confine sediment to the construction area and prevent transportation off-site or discharge into Janes Creek. Site design includes onsite management of stormwater through LID site design measures including soil quality improvement and maintenance,

tree planting and preservation, vegetated swales, permeable asphalt, and 100-foot stream setbacks. These improvements would reduce the volume and rate of runoff and provide for greater infiltration, evaporation, and runoff quality treatment without violating any water quality standards or waste discharge requirements. This impact would be **less than significant**, and no mitigation is required.

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

Less than significant impact. As noted above, the project site is not located within a tsunami zone (DOC 2024c). However, the eastern boundary of the site contains a regulatory floodway and Flood Zone AE, as defined by the Federal Emergency Management Agency (FEMA 2024), and the project site is located approximately one mile north of Humboldt Bay, which may pose a risk of seiche during an earthquake. However, the developed components of the project include a parking lot, shuttle station with bicycle parking, and a bioretention basin, none of which would include storage of hazardous materials that could be released during a flood or seiche event. Runoff from the parking lot would be retained in an on-site detention basin that would allow collected runoff to percolate back into the soil. An outflow would be installed within the detention basin, but would only be used to prevent stormwater flows from ponding for extended periods within the site. These storm drain features would capture and manage onsite flows, but would not result in a risk of pollutant release due to project inundation. Therefore, this impact would be less than significant, and no mitigation is required.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than significant impact. The project would not require groundwater withdrawal. Because the site is relatively flat, grading would be necessary to a depth of approximately 6 inches and would not be substantial enough to encounter groundwater (i.e., groundwater was encountered 7 feet below ground surface [SHN 2024]). As discussed above, site design includes onsite management of stormwater through LID site design measures including soil quality improvement and maintenance, tree planting and preservation, vegetated swales, permeable asphalt, and 100-foot stream setbacks. Furthermore, regulatory requirements, including NPDES permits, would ensure that BMPs would be implemented to address the potential for polluted discharge to enter Janes Creek. Therefore, this impact would be less than significant, and no mitigation is required.

3.11 LAND USE AND PLANNING

ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. Land Use and Planning. Would the project:				
a) Physically divide an established community?				\boxtimes
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?				

3.11.1 Environmental Setting

The project site is vacant land within the City of Arcata, surrounded by residential uses to the north and east, agriculture to the west, and rural residential uses/agriculture to the south. The project site is not located within the Coastal Zone. The project site is designated and zoned for residential low density uses by the City of Arcata (City of Arcata 2019).

3.11.2 Discussion

a) Physically divide an established community?

No impact. The project involves development of a parking lot, shuttle station with bicycle parking, and a bioretention basin on a vacant parcel located between existing residential uses and agricultural uses. These types of development would be limited to a portion of the project site and would not involve development of physical features that could divide the nearby neighborhoods or otherwise affect the cohesiveness of the surrounding community. Therefore, the project would not physically divide an established community and there would be **no impact**, and no mitigation is required.

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?

Less than significant impact. The project site is designated and zoned for residential low density uses by the City of Arcata; however, it is currently owned by Cal Poly Humboldt. As part of the CSU, a statutorily and legislatively created, constitutionally authorized State entity, Cal Poly Humboldt is not subject to municipal regulations of surrounding local governments, such as the City of Arcata general plans or land use designations, for uses on property owned or controlled by Cal Poly Humboldt that are in furtherance of its education purposes. The project would include a parking lot, shuttle station with bicycle parking, and a bioretention basin. As proposed, the project would be generally consistent with the Campus Master Plan (i.e., parking provisions for students attending campus), although the project site itself was not owned by Cal Poly Humboldt at the time the Campus Master Plan was adopted. The project, therefore, would not create a conflict with any plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant, and no mitigation is required.

3.12 MINERAL RESOURCES

	ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	. Mineral Resources. ould the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
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?				

3.12.1 Environmental Setting

Mineral resource production in Humboldt County is primarily limited to sand, gravel, and rock extraction. However, no rock or mineral extraction site are associated with the project site (Humboldt County 2007).

3.12.2 Discussion

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

No impact (a) and b)). As discussed above, mineral resource production in Humboldt County is primarily limited to sand, gravel, and rock extraction. However, no rock or mineral extraction site are associated with the project site (Humboldt County 2007). Because there are no known mineral resources associated with the project site that could be affected, there would be **no impact**, and no mitigation is required.

3.13 **NOISE**

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	I.Noise.				
Wo	ould 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, or a substantial temporary or permanent increase in noise levels above existing ambient levels that could result in an adverse effect on humans?				
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?				

3.13.1 Environmental Setting

ACOUSTIC FUNDAMENTALS

Acoustics is the scientific study that evaluates perception, propagation, absorption, and reflection of sound waves. Sound is a mechanical form of radiant energy, transmitted by a pressure wave through a solid, liquid, or gaseous medium. Sound that is loud, disagreeable, unexpected, or unwanted is generally defined as noise. Noise is typically expressed in decibels (dB), which is a common measurement of sound energy.

A decibel is logarithmic; it does not follow normal algebraic methods and cannot be directly summed. Because decibels are logarithmic units, sound pressure levels (SPLs) cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness at the same time, the resulting sound level at a given distance would be 3 dB higher than if only one of the sound sources was producing sound under the same conditions. For example, if one idling truck generates an SPL of 70 dB, two trucks idling simultaneously would not produce 140 dB; rather, they would combine to produce 73 dB. Under the decibel scale, three sources of equal loudness together produce a sound level approximately 5 dB louder than one source.

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear. Human hearing is limited in the range of audible frequencies as well as in the way it perceives the SPL in that range. In general, people are most sensitive to the frequency range of 1,000–8,000 hertz and perceive sounds within this range better than sounds of the same amplitude with frequencies outside of this range. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human

sensitivity to those frequencies. Then, an "A-weighted" sound level (expressed in units of A-weighted decibels) can be computed based on this information.

The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgment correlates well with the A-scale sound levels of those sounds. Thus, noise levels are typically reported in terms of A weighted decibels. All sound levels discussed in this study are expressed in A-weighted decibels.

Noise in our daily environment fluctuates over time. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors used throughout this study.

- ▶ Equivalent Continuous Sound Level (Leq): Leq represents an average of the sound energy occurring over a specified period. In effect, Leq is the steady-state sound level containing the same acoustical energy as the time-varying sound level that occurs during the same period (Caltrans 2013: 2-48).
- ► Maximum Sound Level (L_{max}): L_{max} is the highest instantaneous sound level measured during a specific period (Caltrans 2013: 2-48; FTA 2018)
- ▶ Vibration Decibels (VdB): VdB is the vibration velocity level in decibel scale (FTA 2018: Table 5-1)
- ▶ Peak Particle Velocity (PPV): PPV is the peak signal value of an oscillating vibration waveform. Usually expressed in inches/second (in/sec) (FTA 2018: Table 5-1).

Noise Generation and Attenuation

Noise can be generated by many sources, including mobile sources such as automobiles, trucks, and airplanes and stationary sources such as activity at construction sites, machinery, and commercial and industrial operations. As sound travels through the atmosphere from the source to the receiver, noise levels attenuate (i.e., decrease) depending on ground absorption characteristics, atmospheric conditions, and the presence of physical barriers. Sound from a localized source (i.e., a point source) propagates uniformly outward in a spherical pattern. The sound level attenuates at a rate of 6 dB for each doubling of distance from a point source. Noise from a line source, such as a road or highway, propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. Noise attenuation from ground absorption and reflective-wave canceling provides additional attenuation associated with geometric spreading. For acoustically absorptive sites such as soft dirt, grass, or scattered bushes and trees, an additional ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the attenuation rate associated with cylindrical spreading, the additional ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance. This would hold true for point sources, resulting in an overall drop-off rate of up to 7.5 dB per doubling of distance.

Atmospheric conditions such as wind speed, wind direction, turbulence, temperature gradients, and humidity also alter the propagation of noise and affect levels at a receiver. Furthermore, the presence of a barrier (e.g., topographic feature, intervening building, and dense vegetation) between the source and the receptor can provide substantial attenuation of noise levels at the receiver. Natural (e.g., berms, hills, and dense vegetation) and human-made features (e.g., buildings and walls) may function as noise barriers.

To provide some context to noise levels described throughout this section, common sources of noise and associated noise levels are presented in Table 3.13-1.

Table 3.13-1 Typical Noise Sources

Common Outdoor Activities	Noise Level (dB)	Common Indoor Activities
	110	Rock band
Jet flyover at 1,000 feet	100	
Gas lawnmower at 3 feet	90	
Diesel truck moving at 50 mph at 50 feet	80	Food blender at 3 feet, garbage disposal at 3 feet
Noisy urban area, gas lawnmower at 100 feet	70	Vacuum cleaner at 10 feet, normal speech at 3 feet
Commercial area, heavy traffic at 300 feet	60	
Quiet urban daytime	50	Large business office, dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime	30	Library, bedroom at night, concert hall (background)
Quiet rural nighttime	20	Broadcast/recording studio
	10	
Threshold of human hearing	0	Threshold of human hearing

Notes: dB = A-weighted decibels; mph = miles per hour.

Source: Caltrans 2013.

GROUND VIBRATION

Vibration is the periodic oscillation of a medium or object with respect to a given reference point. Ground-borne vibration is vibration of and through the ground. Ground-borne vibration can range from levels that are imperceptible by humans to levels that can create substantial damage to buildings and structures. Sources ground-borne of vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) and those introduced by human activity (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, (e.g., operating factory machinery) or transient in nature (e.g., explosions). Vibration levels can be depicted in terms of amplitude and frequency, relative to displacement, velocity, or acceleration.

NOISE- AND VIBRATION-SENSITIVE LAND USES AND RECEPTORS

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose (e.g., schools and libraries), and historic buildings that could sustain structural damage due to vibration. The Project alignment covers approximately 5.5 miles and is located along the western edge of the McClellan Air Business Park and northward within the community of Rio Linda in Sacramento County. There are sensitive receptors (i.e., residential uses) throughout the Project alignment along Winters Street, 20th Street, and Elkhorn Boulevard.

CALIFORNIA STATE UNIVERSITY

Cal Poly Humboldt Administrative Policies

General Policy. Section 141.3.2.1 of the "Campus Administrative Policies" states the following:

 Outdoor events and activities that involve amplified music or speech are limited to the hours of: 7:00 a.m. to 10:00 p.m., Monday through Sunday, and University scheduling protocols must be followed (see sections 144.4 and 141.3.2.2). ▶ Outdoor events and activities that do not require use of amplified sound (for speech or music) may be held between 7:00 a.m. and midnight, Monday through Sunday. Use of the University's scheduling protocols is encouraged, to facilitate coordination with other events and among potential campus service providers. Regardless of the time they are held, events and activities must be conducted in a manner consistent with Section 141.3.1 (General Limitations) and in conformity with any additional guidelines pertinent to a particular venue.

General Policy. Section 141.3.1 of the "Campus Administrative Policies" states the following:

All campus events and activities shall be conducted consistent with Federal and State law, with existing University policies, with the orderly conduct of University business, with preservation of the campus learning environment, with the preservation of public safety, with maintenance of University property and with the free flow of pedestrian and vehicular traffic. Entrances to campus facilities shall not be obstructed. No individual or group shall abridge, halt or disrupt the right of others to present their views. In addition, plans for outdoor events and activities should address potential impacts on residential communities, on and off campus.

LOCAL

Cal Poly Humboldt is part of the CSU, which is a statutorily and legislatively created, constitutionally authorized State entity. As explained in the "California State University Autonomy" section of Chapter 3 of this EIR, the CSU is not subject to local government planning and land use plans, policies, or regulations. Nevertheless, in the exercise of its discretion, Cal Poly Humboldt does reference, describe, and address local plans, policies, and regulations where appropriate and for informational purposes. This evaluation is also intended to be used by local agencies for determining, as part of their permit processes, the project's consistency with local plans, policies, and regulations.

City of Arcata General Plan

The City of Arcata General Plan contains goals and policies related to noise. Relevant policies are included below:

- Policy N-1a: Noise attenuation measures. Noise attenuation measures and stationary noise source controls shall include the use of barriers, setbacks, site design, baffles, enclosures, silencers, and improved facade construction techniques.
- ▶ Policy N-1b: Noise attenuation guidelines. Noise attenuation measures and stationary noise source controls shall follow the guidelines provided in the technical document entitled: *Noise Control Manual* (which is considered an implementation measure).
- ▶ Policy N-1c: Noise mitigation. Where noise mitigation measures are required, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.
- ▶ Policy N-2c: Noise created by new or proposed stationary noise sources. Noise created by new or proposed stationary noise sources, or the expansion or alteration of an existing use, shall be mitigated so as not to exceed noise level standards (Table N-1) [Table 3.13-2 in this EIR] at noise-sensitive land uses. All noise generators not in compliance with these standards will be encouraged to mitigate impacts.

Table 3.13-2 City of Arcata Noise Standards for New Projects and Retrofits

Land Use Noise Level Descriptor	Exterior 7am-7pm	Exterior 7pm to 10pm	Exterior 10pm to 7am	Interior 7am to 7pm	Interior 7pm to 10pm	Interior 10pm to 7am
Residences, Transient Lodging, Hospitals, Nursing Homes	-					
Hourly L _{eq}	55 dB	50 dB	45 dB	45 dB	40 dB	35 dB
Maximum	75 dB	75 dB	70 dB	65 dB	65 dB	60 dB
Auditoriums, Theaters, Libraries, Schools, Churches						
Hourly L _{eq}	55 dB	55 dB	n/a	40 dB	40 dB	n/a
Maximum	75 dB	75 dB	n/a	60 dB	60 dB	n/a

The City can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site.

The standards will be applied at the outdoor activity areas of the receiving land use, and at the building facade for upper floor receivers which do not have an outdoor activity area facing the noise source. Where no outdoor activity area is identified, the City has the option to apply only the interior noise level performance standards.

Source: City of Arcata 2020.

▶ Policy N-2d: Acceptable noise levels. New construction and retrofits at existing buildings shall include appropriate insulation, glazing, and other sound attenuation measures so that they comply with standards contained in Table N-1 [Table 3.13-3 in this EIR]. These standards are intended to set levels for external noise sources that could potentially impact a new dwelling or other noise-sensitive use.

Table 3.13-3 City of Arcata Maximum Allowable Transportation Noise Sources Exposure

Property Receiving Noise Type of Use	Property Receiving Noise Outdoor Activity Areas ¹ L _{dr/} /CNEL, dB	Interior Spaces L _{dn/} CNEL, dB	Interior Spaces L _{eq. dB} ²
Residential	60 ³	45	_
Transient Lodging	60 ⁴	45	_
Hospitals, Nursing Homes	60 ³	45	_
Theaters, Auditoriums, Music Halls	_	_	35
Churches, Meeting Halls	60 ³	_	40
Office Buildings	_	_	45
Schools, Libraries, Museums	_	_	45
Playgrounds, Neighborhood Parks	70	_	_

Notes: CNEL = community noise equivalent level; L_{dn} = day-night average noise level

Source: City of Arcata 2020.

▶ Policy N-3a: New development of noise-sensitive land uses. New development of noise receptors will not be permitted in areas exposed to existing or projected levels of transportation noise exceeding levels specified in Table N-2 [Table 3.13-3] unless exterior noise or noise levels in interior spaces can be reduced to meet City Standards (Table N-2) [Table 3.13-2].

These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

¹ Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use

² As determined for a typical worst-case hour during periods of use.

³ Where it is not possible to reduce noise in outdoor activity areas to 60 dB Ldn/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB Ldn/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

⁴ In the case of hotel/motel facilities or other transient lodging, outdoor activity areas such as pool areas may not be included in the project design. In these cases, only the interior noise level criterion will apply.

- ▶ Policy N-3c: Roadway projects. To minimize noise impacts, the following criteria may be used as a test of significance for roadway projects:
 - 1. Where existing traffic noise levels are less than 60 dB L_{dn} at the outdoor activity areas of noise receptors, a +5 dB L_{dn} increase in noise levels due to a roadway improvement project will be considered significant.
 - 2. Where existing traffic noise levels range between 60 and 65 dB L_{dn} at the outdoor activity areas of noise receptors, a +3 dB L_{dn} increase in noise levels due to a roadway improvement project will be considered significant.
 - 3. Where existing traffic noise levels are greater than 65 dB L_{dn} at the outdoor activity areas of noise receptors, a + 1.5 dB L_{dn} increase in noise levels due to a roadway improvement project will be considered significant.
- ▶ Policy N-5a: Intrusive noise. When intrusive noise sources have been identified, the detrimental effects (sleep interference or the potential for annoyance) shall be disclosed to neighboring receptor properties.
- ▶ Policy N-5b: Noise levels due to non-transportation sources. Noise levels due to non-transportation sources which may be intermittent or recurring, impulsive noises, pure tones, or noises consisting primarily of speech or music, shall be subject to the criteria contained within Table N-1 [Table 3.13-2], with a 5 dB penalty applied to the criteria.
- ▶ Policy N-5c: Rhythmic, recurring, or impulsive noise sources. When noise sources have been identified to be rhythmic, reoccurring, or impulsive in nature or comprised mainly of music or speech, they may comply with applicable noise level criteria and still be annoying to individuals. When these types of noise sources have been identified, they may be subject to additional mitigation or mediation.
- ▶ Policy N-5d: Construction site tool or equipment noise. The following shall apply to construction noise from tools and equipment:
 - 1. The operation of tools or equipment used in construction, drilling, repair, alteration or demolition shall be limited to between the hours of 8 a.m. and 7 p.m. Monday through Friday, and between 9 a.m. and 7 p.m. on Saturdays.
 - 2. No heavy equipment related construction activities shall be allowed on Sundays or holidays.

This shall apply to construction noise from tools and equipment which are subject to the review of the City, and which may affect receptor uses. This policy shall not apply to emergency work of public service utilities or by variance under a noise ordinance.

▶ Policy N-5e: Stationary and construction equipment noise. All stationary and construction equipment shall be maintained in good working order and fitted with factory approved muffler systems.

City of Arcata Municipal Code

Article 2 of the City of Arcata's Municipal Code sets exterior noise level standards for the Downtown Plaza area of the city; however, because the project is not within the Downtown Plaza, those standards do not apply. Chapter 9.30.050 Noise Standards adopts the noise standards from the General Plan. In accordance with this section of the municipal code, noise level standards shown in Table 3.13-2 above would apply to operational non-transportation noise sources and the standards shown in Table 3.13-3 would apply to operational transportation noise sources. Last, this section also establishes limitations on hours of construction Monday through Friday from 8:00 a.m. to 7:00 p.m., Saturday from 9:00 a.m. to 7:00 p.m., and no heavy equipment-related construction activities on Sundays and holidays.

3.13.2 Discussion

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, or a substantial temporary or permanent increase in noise levels above existing ambient levels that could result in an adverse effect on humans?

Less than significant impact with mitigation incorporated. The project would result in a temporary increase in noise levels during construction as a result of heavy equipment movement and pavement removal, but no permanent increases in ambient noise levels would occur during operation. During operation, the project could result in additional roadway noise along Foster Avenue as a result of increased vehicle traffic from parking lot use.

Construction

Construction of the project would occur over approximately 6 months. Construction activities would generate noise near individual sensitive receptors throughout the duration of the construction period, but only for a short period of time due to the linear nature of construction activities. As detailed in Chapter 2, "Project Description," although not required, construction would voluntarily be conducted in a manner consistent with the City and County construction-related noise ordinances. Accordingly, construction would occur Monday through Friday from 8:00 a.m. to 7:00 p.m. with potential for construction on Saturdays from 9:00 a.m. to 7:00 p.m. No construction would occur on Sundays and holidays. Overall construction activities would include site grading and excavation, utility trenching, building foundation pouring, and building construction.

The types of heavy equipment used during project construction would include dozers, backhoes, excavators, graders, scrapers, pavers, rollers, and haul trucks. No pile driving or blasting would occur as part of the project. Reference noise levels of heavy equipment that would be used during project construction, as experienced at a distance of 50 feet from the noise source, are summarized in Table 3.13-4. Note that the noise levels do not take into account attenuation by intervening topography and vegetation; thus, likely overestimating noise levels.

Table 3.13-4 Noise Levels from Construction Equipment

Equipment Type	Typical Noise Level (L _{max} dBA) @ 50 feet
Backhoe	80
Concrete Mixer	85
Compactor	80
Dozer	85
Dump Truck	84
Excavator	85
Flat Bed Truck	84
Front End Loader	80
Grader	85
Paver	89
Roller	85
Pickup Trucks	54
Scraper	85

Notes: Assumes all equipment is fitted with a properly maintained and operational noise control device, per manufacturer specifications. Noise levels listed are manufacture-specified noise levels for each piece of heavy construction equipment.

Source: FTA 2018: 176

Construction noise can be characterized based on the type of activity and associated equipment needed and, in this analysis, is evaluated by considering noise levels associated with site preparation, grading, building construction, and

paving, all construction phases that would occur throughout the buildout of the project and activities that generate the most noise. Using construction equipment typically associated with these construction phases, reference noise levels shown in Table 3.13-4, and assuming the simultaneous use of multiple pieces of equipment, potential construction noise levels at the two nearest sensitive receptors (1887 Q Street, which is immediately south of the project site, and 2125 Foster Avenue, which is located across McDaniel Slough) were modeled. Anticipated noise levels during site grading would be approximately 82 dBA L_{eq} at 1887 Q Street and 68.4 dBA L_{eq} at 2125 Foster Avenue.

Neither the City nor the CSU have adopted construction-related numerical noise limits at sensitive receptors for construction activities. For context as to the noise levels sensitive receptors could be exposed to, noise levels in the range of 84 dBA to 86 dBA are comparable to a diesel truck driving by. The FTA has established noise criteria for the purpose of conducting construction noise assessments, which is 90 dBA L_{eq} for residential receptors, and projected construction noise from the project would not exceed this threshold at either location. Further, construction noise would generally occur during the day and during less noise-sensitive hours. However, even though project construction is not anticipated to exceed 90 dBA L_{eq}, it would represent a noticeable increase in ambient noise levels and steps can be taken to reduce increases in ambient noise levels. For this reason, impacts on those receptors are considered **potentially significant**.

Mitigation Measures

Mitigation Measure 3.13-1 Implement Construction-Noise Reduction Measures

For all construction activities on the project site and off-site, Cal Poly Humboldt shall implement or incorporate the following noise reduction measures into construction specifications for contractor(s) implementation during project construction:

- All construction activities shall be conducted in accordance with the construction hour limits established by Section 9.30.050 of the City's Municipal Code. Construction would occur Monday through Friday between the hours of 8:00 a.m. and 7:00 p.m., with the potential for weekend construction on Saturday between 9:00 a.m. and 7:00 p.m. No construction shall occur on Sundays or holidays.
- ▶ All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturer recommendations. Equipment engine shrouds shall be closed during equipment operation.
- All stationary construction equipment and equipment staging areas shall be located as far as possible from nearby noise-sensitive land uses, and/or located to the extent feasible such that existing or constructed noise attenuating features (e.g., temporary noise wall or blankets) block the line-of-sight between affected noise-sensitive land uses and construction staging areas.
- No less than 1 week prior to the start of construction activities at a particular location, a notification shall be provided to nearby noise-sensitive land uses (e.g., residential uses) that are located within 150 feet of the construction site (i.e., based on the construction noise modeling, the distance at which noise-sensitive receptors would experience construction noise).
- ► The contractor shall designate a disturbance coordinator and post that person's telephone number conspicuously around the construction site and provide to nearby residences. The disturbance coordinator shall receive all public complaints and be responsible for determining the cause of the complaint and implementing any feasible measures to alleviate the problem.

Significance after Mitigation

Implementation of Mitigation Measure 3.13-1 would reduce potential construction-related noise impacts by minimizing the exposure of nearby sensitive receptors to elevated noise levels generated during construction to a less than significant level.

Operation

Long-term increases in traffic noise could occur as a result of increased vehicular trips on local roads near the project site. Based on project-generated traffic associated with the proposed parking lot, traffic noise modeling was conducted for Foster Avenue east and west of the project site using AM peak hour trip volumes, which considered existing traffic volumes and associated noise levels and existing plus project anticipated traffic volumes and associated noise level increases. See Appendix D for modeling inputs and outputs. Traffic noise modeling results is summarized below in Table 3.13-5.

Table 3.13-5 Long-Term Traffic Noise Increases

Roadway Segment/Segment Description	Existing dBA L _{eq} at Nearby Receptors	Existing + Project dBA L _{eq} at Nearby Receptors	Change
Foster Avenue from Project Entrance to the East	58.3	59.7	+1.4
Foster Avenue from Project Entrance to the West	58.3	59.1	+0.8

Notes: dBA = A-weighted decibel, L_{eq} = Average noise level over (in this case) the peak hour.

Source: Modeled by Ascent 2025.

As shown above in Table 3.13-5, traffic noise increases along Foster Avenue, which is expected to have the greatest increase in peak hour vehicles as a result of the project, would be approximately 2.5 dBA (which is considered barely perceptible). Further, the City of Arcata's noise standards generally consider an increase above 3 dBA (where ambient noise levels are between 60 and 65 dBA) to be substantial. As a result, the project increase in roadway noise levels as a result of the project would not be substantial, and this impact would be **less than significant**.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than significant impact. Project construction would not involve the use of ground-vibration intensive activities, such as impact pile driving or blasting; however, construction may result in varying degrees of temporary ground vibration and noise levels due to the intermittent operation of construction equipment and activities. Pieces of equipment that generate lower levels of ground vibration, such as dozers and drills, would be used during construction. FTA guidance for maximum acceptable VdB levels are primarily concerned with sleep disturbance in residential areas and can be avoided by keeping exposures at or below 80 VdB during typical sleeping hours, or if the vibration events are infrequent (i.e., 30 per day).

Based on FTA reference vibration levels for typical construction equipment, vibration from the use of large bulldozer would exceed FTA significance criterion for structural damage (i.e., 0.20 PPV in/sec) within 15 feet and the criterion for impact of infrequent events on residences (i.e., 80 VdB) within 43 feet (FTA 2018: 184). Construction activities involving large pieces of machinery are not anticipated to occur within 43 feet of sensitive receptors. Additionally, construction would only take place during the less sensitive daytime hours in accordance with local standards. Thus, the Project would not result in the exposure of the existing off-site receptors to excessive ground vibration levels. The impact would be less than significant, and no mitigation is required.

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. The nearest airport, Murray Field Airport, is located 5.2 miles south of the project site. The Arcata/Eureka Airport is located approximately 5.6 miles north of the project site. The project site is outside of any airport influence area. The project site is not located within an airport influence area, and no public or private airport/airstrip is located within two miles of the project site. Thus, the project would not result in noise impacts related to the exposure of people residing or working in the project area to excessive aircraft-related noise levels. There would be **no impact**, and no mitigation is required.

3.14 POPULATION AND HOUSING

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. Population Would the project:	n and Housing.				
an area, either new homes and	tial unplanned population growth in directly (for example, by proposing d businesses) or indirectly (for gh extension of roads or other				
housing, neces	ntial numbers of existing people or sitating the construction of busing elsewhere?				

3.14.1 Environmental Setting

The project site is vacant land within the City of Arcata, surrounded by residential uses to the north and east, agriculture to the west, and rural residential uses/agriculture to the south. The project site is designated and zoned for residential low density uses by the City of Arcata (City of Arcata 2019).

3.14.2 Discussion

- 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) 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 (a) and b)). The project would involve the construction and operation of a parking lot to be used by Cal Poly Humboldt students to reduce parking demands on local streets. The project would not result in the construction of new housing units or other structures that could induce growth in the project vicinity or demolition of existing housing. As such, the project would not affect population or housing. Therefore, there would be **no impact**, and no mitigation is required.

3.15 PUBLIC SERVICES

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

3.15.1 Environmental Setting

FIRE PROTECTION

Arcata City Fire Department

The project site and the City of Arcata are located within the Arcata Fire District (AFD). The AFD boundaries encompass 65 square miles and extend west to the Pacific Ocean, north to the Clam Beach area, east to Essex, and south to Indianola and Manila. The AFD is an all-risk fire department responsible for protecting life, property, and the environment from the hazards of fire and hazardous materials incidents and providing emergency medical services.

LAW ENFORCEMENT

University Police Department

As CSU property, the project site is under the primary jurisdiction of the CSU-operated University Police Department (UPD). The mission of the UPD is to promote a safe and secure learning environment by working cooperatively with the campus community to enforce the laws, preserve the peace, maintain order, and provide exceptional professional services to the campus community. The UPD is responsible for responding to and handling all calls for service, as well as processing and investigating all crimes committed on property and grounds owned, operated, and controlled or administered by the CSU. The matters the UPD investigates are referred to the appropriate prosecutorial agency (County District Attorney, State Attorney General, or US Attorney's Office) for a decision regarding whether or not to prosecute the matter.

In addition to police patrol, the UPD provides the following services:

- bicycle patrol,
- ▶ 9-1-1 communications,
- ▶ investigations,
- campus safety reports,
- escort van service and mustang patrol (safe walking escort),
- property registration, and
- special events/event security.

The UPD patrol officers work cooperatively with numerous agencies, including the City of Arcata Police Department, the Humboldt County Sheriff's Department, Parole Services, CHP, and the Narcotics and Gang Task Forces, to solve crimes and provide agency assistance (referred to as mutual aid). For example, the UPD works closely with the City of Arcata Police Department in and around the Cal Poly Humboldt campus neighborhoods and supports the City Police Department by proactively patrolling land within a 1-mile radius of campus that is technically within the City Police Department's jurisdiction to deter disorderly conduct. UPD officers may also respond to citizen calls for service within the jurisdictional responsibility of the City of Arcata Police Department, and the UPD partners with the City in enforcement efforts for major events on campus.

City of Arcata Police Department

The City of Arcata Police Department provides public safety services and 24-hour police protection within the City limits. The main station office is at City Hall, located at 736 F Street in downtown Arcata, which is approximately 1.25 miles from the project site. The City of Arcata Police Department currently employs 22 full-time police officers, one public safety officer, eight support staff (office staff, dispatchers, and lead parking officer), and one part-time officer (Brazil, pers. comm., 2022).

Humboldt County Sheriff's Department

The Humboldt County Sheriff's Department is responsible for law enforcement in the unincorporated areas around the City and provides service from the Sheriff's Department Eureka Main Station, located at the Humboldt County Courthouse. Service is available 24 hours a day, 7 days a week to the unincorporated areas of Humboldt County. The County Sheriff's service area consists of two main beats: Central and South. The central beat covers the unincorporated areas of Arcata (Bayside, Fickle Hill) and Eureka (Myrtletown, Cutten, Pine Hill, Samoa, Fairhaven), along with the areas of Kneeland and Elk River (Humboldt County Sheriff's Office 2022). The Humboldt County Sheriff's Department may provide support service through mutual aid agreements to the project site, if necessary.

California Highway Patrol

CHP is responsible for traffic enforcement services on public streets and highways within the unincorporated area. CHP traffic enforcement service is provided from the CHP Northern Division Humboldt Area office, located in Arcata on Samoa Boulevard. CHP also provides other special law enforcement services, as well as mutual aid to the UPD, City of Arcata Police Department, and Humboldt County Sheriff's Department, upon request.

3.15.2 Discussion

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

Fire protection?

Police protection?

Schools?

Parks?

Other public facilities?

Less than significant impact. The project would involve the construction and operation of a parking lot, shuttle station with bicycle parking, and a bioretention basin. As discussed above, under Section 3.14, "Population and Housing," the project would not result in unplanned growth that would affect public services ratios for schools or parks. Security at the site would be provided by Cal Poly Humboldt's university police department, thus there would not be an increased demand on law enforcement. In addition, the project site is already within the service boundary of the Arcata Fire District and would not require the construction of a new or expanded fire station, the construction of which could cause significant environmental impacts. No on-site structures would require specialized equipment or training. Therefore, impacts would be less than significant, and no mitigation is required.

3.16 RECREATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. Recreation. Would the project:				
 a) Increase the use of existing neighborhood and regional parks or other recreational facilities so substantial physical deterioration of the facility occur or be accelerated? 	uch that			
b) Include recreational facilities or require the construction or expansion of recreational facili that might have an adverse physical effect on environment?				

3.16.1 Environmental Setting

The City of Arcata maintains a network of parks distributed throughout the City. Arcata's parks have varied facilities and offer many recreational and educational opportunities. The closest park to the project site is Shay Park, located 0.15 mile to the east. The project frontage provides an unofficial, unpaved recreational trail that is used occasionally by pedestrians.

3.16.2 Discussion

- a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Less than significant impact (a) and b)). As noted above, the project frontage provides an unofficial, unpaved recreational trail that is used occasionally by pedestrians. The project would improve this area, which would better support use by cyclists and pedestrians. Additionally, as discussed above under Section 3.14, "Population and Housing," the project would not contribute to unplanned growth that could create demand for new recreational facilities or increase use of existing recreational facilities. Therefore, impacts on recreation resources would be less than significant, and no mitigation is required.

3.17 TRANSPORTATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. Transportation. Would the project:				
 a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? 			\boxtimes	
b) Conflict or be inconsistent with CEQA Guidelines section 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?			\boxtimes	

3.17.1 Environmental Setting

Regional access to the project site is available from the east via US 101. Foster Avenue provides primary local access to and from the site and is an east-west local street with one travel lane in each direction. Currently it connects with Q Street and 17 Street to the south and stretches all the way to the west end of the city where it turns into Jackson Ranch Road. The posted speed limit along Foster Avenue is 25 miles per hour. There are no pedestrian or dedicated bike facilities along Foster Avenue near the project site with the exception of an unpaved pathway along the existing railroad right of way. Pedestrian facilities, including sidewalks and marked crosswalks are present along Q Street, south of 17th Street, and along 17th Street between Q Street and Alliance Road.

The project area is served by the Arcata & Mad River Transit System (A&MRTS), which provides fixed-route transit service within the City of Arcata. Additionally, paratransit service is also available for those who are unable to independently use the transit system due to medical and other conditions. The nearest public transit stop is located about 0.2 miles from the project site at the intersection of Foster Avenue and Alliance Road, which is served by the A&MRTS Green, Gold, and Orange routes running on weekdays with hourly headways.

VEHICLE MILES TRAVELED

In their Technical Advisory on the Evaluation of Transportation Impacts in CEQA (December 2018), the Governor's Office of Land Use and Climate Innovation (LCI) (formerly the Office of Planning and Research), provides non-binding guidance on thresholds that can be used to analyze CEQA transportation impacts, using VMT as the quantified metric for evaluation. In its capacity as lead agency, the CSU has adopted the Technical Advisory VMT metrics, methodologies, and thresholds as summarized in the CSU Transportation Impact Study Manual (TISM). The basis of these LCI-recommended thresholds includes state climate planning documents and legislation.

CEQA Guidelines §15064.3(a) notes that, for the purposes of §15064.3 and CEQA Transportation analysis, VMT "refers to the amount and distance of automobile travel attributable to a project." This statement has been interpreted by LCI to mean automobile and light-duty truck travel (e.g., pickup trucks). For many residential land uses, the amount and distance of automobile travel is the overwhelming component of weekday daily VMT. LCI notes that heavy-duty truck VMT could be included for convenience and ease of calculation, if a lead agency chooses to include it in the calculations, but is not required.

In the Technical Advisory, LCI-recommended thresholds and calculation approaches for three project types: residential, office, and retail. The thresholds and calculation approaches noted in the Technical Advisory are in part based on the legislative intent of SB 743, which include (1) promoting infill development, (2) promoting healthy communities by encouraging active transportation, and (3) helping California meet its statewide climate targets. In essence, the switch to VMT measures the efficiency of land use patterns and streamlines development that enhances a diversity of land uses and access to common goods and commercial/public services.

The CSU TISM recommends a significance threshold of 15 percent below existing VMT for project-level impacts associated with specific projects when measuring VMT on a per person or per capita basis, but there are no recommended VMT significance thresholds for parking projects. For that reason, this analysis focuses on total VMT per service population for the campus (inclusive of the project) as the appropriate metric and a net change of total VMT per service population as the threshold. Because the project would not increase student enrollment, the appropriate threshold is whether project implementation would create a net positive change in total VMT (Appendix A).

3.17.2 Discussion

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

Less than significant impact. The existing transit system is expected to accommodate project-generated demand for transit services as the project is proposing to provide a shuttle to transport students between the parking lot and campus Monday through Friday from 7 a.m. to 6 p.m. every 15 minutes. Alliance Road currently has a Class II bike lane between Spear Avenue and 11th Street, where it turns into a Class III bike route. According to the Arcata General Plan 2045, Foster Avenue is planned to have segments of Class I multi-use paths and Class II bike lanes which would continue through Sunset Avenue, G Street, and H Street. The project does not include any modification to roadway alignment or striping.

As discussed above under Section 3.17.1, "Environmental Setting," there are no sidewalks along Foster Avenue between Q Street and the project site. Because the project would be increasing vehicular trips along Foster Avenue, there could be a hazard for pedestrians along this portion of roadway due to the lack of a raised curb or other safety features. However, as part of the project, shuttle service would be provided every 15 minutes from the proposed parking lot to campus and would include a stop with appropriate signage at the intersection of Q Street and 17th Street. The additional shuttle stop and wayfinding signage would encourage users to opt for shuttle service from the project site, or at the Q and 17th Street stop, rather than walking along roadways from the parking lot to campus or from residences south of the project site to the proposed parking lot (Appendix A). Additionally, in the event that an individual misses a shuttle, the frequency of service would encourage individuals to wait for the next shuttle rather than attempt to walk to campus (i.e., approximately 5 minutes via shuttle versus approximately 30 minutes via walking from the proposed parking lot to campus). For these reasons, the project would not substantially increase pedestrian users along portions of roadways that lack sufficient facilities. Therefore, impacts to pedestrian and bicycle systems would be less than significant, and no mitigation is required.

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), which pertains to vehicle miles traveled?

Less than significant impact. As noted previously in the CEQA significance criteria for the VMT impacts discussion, total VMT per service population was selected as the metric for this analysis. The two inputs needed to calculate total VMT are trip generation and average trip length. As noted above, the 2004 Campus Master Plan EIR anticipated a total of 4,745 parking stalls to be provided on campus. As of this writing, because of various approved projects, 37 existing parking stalls will be removed to allow for development of these approved projects. In addition, 1,000 of the parking stalls approved as part of the Campus Master Plan are not anticipated to be built, as Cal Poly Humboldt does not currently control the property associated with the planned spaces. As a result, the originally envisioned parking at those locations is not considered reasonably foreseeable (Appendix A). While current campus enrollment stood at 5,525 full-time equivalent (FTE) students as of 2024, the current Campus Master Plan projected up to 12,500 FTE

students and determined parking demand based on the envisioned FTE count (CSU Humboldt 2004, CSU 2025). The project seeks to contribute to the creation of an adequate parking supply for that enrollment through the creation of additional parking resources within the approved total per the current Campus Master Plan, as adopted in 2004.

It can reasonably be assumed that the project (212 parking spaces) would generate fewer trips than the parking spaces that were anticipated under the Campus Master Plan but not built (i.e., 1,037 parking spaces). Further, due to the distance between the Cal Poly Humboldt campus and the project site, students may use the project site as a long-term versus daily parking lot facility. However, to simplify VMT calculations and present a conservative analysis for the purposes of CEQA, it was assumed that each parking spot proposed by the project would generate up to approximately two trips per day—one inbound trip to the project site in the AM peak period, and one outbound trip from the project site in the PM peak period (Appendix A).

For trip length considerations, GPS-based "Big Data" regarding campus-related trips was analyzed to estimate the average trip length of vehicles commuting to and from campus. The analysis found that the average one-way trip length is 5.7 miles. Given that the project site is located outside of campus, it is reasonable to expect an increase in the trip length of vehicles parking at the project site. Based on the distance between campus and the project site and the main routes to and from campus, a one-mile increase in driving distances was assumed, resulting in trip lengths of 6.7 miles each way for vehicles driving to and from the project site. As shown in Table 3.17-1 below, the total VMT for the Baseline Scenario, which includes 1,000 spaces that were approved but no longer planned to be constructed and 37 existing spaces to be removed to accommodate approved development, is greater than the total VMT that the 212 off-campus parking spaces proposed by the project would generate (Appendix A). This results in a net decrease in VMT, indicating that the impact to VMT from the project would be **less than significant** and no mitigation is required.

Table 3.17-1 Vehicle-Miles Traveled Calculation

	Baseline Scenario	Project Scenario	Changes in Total VMT
Parking Spots	1,037	212	
Trip Generation	2,074	424	
Trip Length	5.7	6.7	
Total VMT	11,822	2,841	-8,981

Source: Appendix A.

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

Less than significant impact. Vehicular site access would be provided via two proposed 30-foot-wide driveways along Foster Avenue, which would be adequately sized to support vehicles entering and exiting the parking area. Stopping sight distance is a critical factor that ensures drivers have enough time and space to stop to avoid hazards. According to Table 201.1 of the Caltrans Highway Design Manual, the stopping sight distance at 25 miles per hour is 150 feet. The sight distance entering the project site at both driveways appears to be more than 150 feet, indicating that the sight distance should be adequate. Further and with respect to bicycle safety, Alliance Road currently has a Class II bike lane between Spear Avenue and 11th Street, where it turns into a Class III bike route. According to the Arcata General Plan 2045, Foster Avenue is planned to have segments of Class I multi-use paths and Class II bike lanes which would continue through Sunset Avenue, G Street, and H Street. Foster Avenue is also identified as an intermediate, unofficial bike route by the Redwood Community Action Agency (RCAA) for NCUAQMD (RCAA 1999), and is considered capable of accommodating bicycle traffic to and from the site in its current design. As noted above under a), while pedestrian facilities are not available along Foster Avenue, south of the project site, individuals seeking shuttle service to campus would be collected from areas where pedestrian facilities are available (i.e., from the proposed shuttle station within the parking lot or proposed bus stop at the intersection of Q Street and 17th Street). Thus, the project would not encourage new foot traffic along Foster Avenue where pedestrian facilities are not available. Overall, the project does not introduce incompatible uses to the roadway system and would not introduce geometric features that would result in hazardous conditions (Appendix A). Thus, the potential to create a substantial hazard due to geometric design features or incompatible uses would be less than significant, and no mitigation is required.

d) Result in inadequate emergency access?

Less than significant impact. Factors such as number of access points, roadway width, and proximity to fire stations determine whether a project provides sufficient emergency access. The closest fire station to the project site is located approximately one mile to the southeast of the project site at 9th Street and F Street. The project site includes two access points for access, both of which are approximately 30 feet wide and could accommodate emergency vehicles. Additionally, the internal driving aisles are 25 and 30 feet wide, respectively, which is sufficient for emergency vehicle circulation. In the event of an emergency, Cal Poly Humboldt would collaborate with the City to prepare and implement emergency response and evacuation procedures due to wildfires, floods, and other potential emergency situations. The proposed on-site roadway design provides adequate emergency vehicle circulation and sufficient clearance to accommodate likely emergency vehicle movements (Appendix A). Therefore, impacts on the adequacy of emergency access would be less than significant, and no mitigation is required.

3.18 TRIBAL CULTURAL RESOURCES

ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. Tribal Cultural Resources. Has a California Native American Tribe requested consultation in accordance with Public Resources Code section 21080.3.1(b)? 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:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?				\boxtimes
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?				

3.18.1 Environmental Setting

Under PRC section 21080.3.1 and 21082.3, Cal Poly Humboldt must consult with tribes traditionally and culturally affiliated with the project site that have requested formal notification and responded with a request for consultation. The parties must consult in good faith. Consultation is deemed concluded when the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource when one is present or when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed on during the consultation process must be recommended for inclusion in the environmental document.

On June 24, 2024, Cal Poly Humboldt sent notification letters that the project was being addressed under CEQA, as required by PRC 21080.3.1, to the three Native American tribes that had previously requested such notifications: Blue Lake Rancheria, Wiyot Tribe, and Bear River Band of Rohnerville Rancheria. Blue Lake Rancheria and Bear River Band of Rohnerville Rancheria did not respond to the AB 52 notification letters. The Wiyot Tribe responded on November 1, 2024, that the project's activities do not appear to represent a significant impact on cultural resources. The Wiyot Tribe also request that inadvertent archaeological discovery protocols be in place for any ground disturbing activities. The Wiyot Tribe's request has been incorporated in Section 3.5, Cultural Resources, Mitigation Measure 3.5-1. No further responses were received from the Wiyot Tribe.

The cultural resources study prepared for the project included a request for a NAHC Sacred Lands File search (Ascent 2024). On May 28, 2024, the NAHC search indicated that the Sacred Lands File results were negative for the presence of Native American resources within the project site.

3.18.2 Discussion

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:

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

No impact. The project site contains no tribal cultural resources that are listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources. There would be no impact, and no mitigation is required.

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

Less than significant impact with mitigation incorporated. Blue Lake Rancheria and Bear River Band of Rohnerville Rancheria did not respond to the AB 52 notification letters. The Wiyot Tribe responded but did not identify any tribal cultural resources within the project site. However, the Wiyot Tribe requested that inadvertent discoveries measures for archaeological resources be put in place (see Section 3.5, Cultural Resources, Mitigation Measure 3.5-1). The NAHC SFL results returned negative for the presence of tribal cultural resources. However, it is possible that yet-undiscovered tribal cultural resources could be encountered or damaged during ground-disturbing construction activities. This impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.18-1: Unanticipated Discoveries of Potential Tribal Cultural Resources

If any suspected tribal cultural resources are discovered during ground disturbing construction activities, including midden soil, artifacts, chipped stone, exotic rock (nonnative), or unusual amounts of baked clay, shell, or bone, all work shall cease within 50 feet of the find. A culturally and geographically affiliated tribal representative(s) shall be immediately notified and shall determine if the find is a tribal cultural resource (pursuant to PRC section 21074). The tribal representative will make recommendations for further evaluation and treatment, as necessary.

Preservation in place is the preferred alternative under CEQA and the tribes' protocols, and every effort must be made to preserve the resources in place, including through project redesign. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project site where they will not be subject to future impacts. Tribes do not consider curation of tribal cultural resources to be appropriate or respectful and request that materials not be permanently curated, unless approved by the tribe. Treatment that preserves or restores the cultural character and integrity of a tribal cultural resource may include tribal monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil.

Significance After Mitigation

Implementation of Mitigation Measure 3.18-1 would reduce potential impacts to tribal cultural resources to a **less than significant** level by requiring notification of tribal representatives in the case of a discovery, appropriate treatment, and proper care of significant tribal cultural resources.

3.19 UTILITIES AND SERVICE SYSTEMS

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX Wo	K. Utilities and Service Systems. ould the project:				
a)	Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?				
b)	Have insufficient 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 that serves or may serve the project that it has inadequate 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)	Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				

3.19.1 Environmental Setting

There are currently no utilities or service systems provided within the project site. PG&E provides electricity to customers in the City and to Cal Poly Humboldt. Overhead electric distribution lines extend along Foster Avenue and within the residential areas located to the north and east of the project site.

Stormwater drainage features on the site are limited to roadside ditches lining Foster Avenue along the southern edge of the project site.

Solid waste generated in the area is currently transported to the Humboldt Waste Management Authority's Hawthorne Street Transfer Station in Eureka. Solid waste is then shipped to the Dry Creek Landfill, in Medford, Oregon, and the Anderson Landfill, in Anderson, California. Single Stream Recycling is available at the Hawthorne Street Transfer Station for a fee. The Dry Creek Landfill is located in Jackson County, Oregon and receives approximately 2,000 tons of solid waste per day. Expanded in 1999 to a regional facility, the landfill is anticipated to have available capacity (based on current projected disposal rates) for more than 100 years from the date of its expansion. (Rogue Disposal & Recycling 2025). The Anderson Landfill is located in Shasta County, California and is currently permitted to receive 1,850 tons per day. The Anderson Landfill has a maximum permitted capacity of 16,353,000 cubic yards and a remaining capacity of 10,409,132 cubic yards. The Anderson Landfill is projected to close in 2060 (CalRecycle 2025).

3.19.2 Discussion

a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

Less than significant impact. The project does not include construction of new water, wastewater, natural gas, or telecommunication facilities. Development of the site would include extension of electrical power lines from along Foster Avenue to support security cameras and light fixtures. Extension of power would be accommodated by tying into the existing power lines and would not require additional offsite improvements, such as a new substation or upgraded power lines. In addition, water pipelines would be extended from the main the Foster Avenue to the shuttle station. These would be constructed underground as part of development of the site and would not require any additional improvements to water infrastructure. Thus, there would be no substantial environmental effects associated with extension of utility lines to support the project.

The project also includes the provision of new stormwater drainage facilities to accommodate additional flows associated with impervious on-site surfaces, as compared to existing conditions. Drains would be installed between parking lot isles, from which stormwater would be collected and conveyed to the existing ditches located along the southern edge of the parking lot and within new unlined bioretention facilities that would be established between the parking area and Janes Creek. Water from the ditches would be discharged to Janes Creek, while water within the bioretention facilities would be left to percolate or evaporate. All stormwater conveyance and collection features established on the site would be developed using stormwater treatment BMPs, and would be designed to be consistent with state requirements (see Section 3.10, "Hydrology and Water Quality," for more information on discharge). This impact would be **less than significant**, and no mitigation is required.

b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than significant impact. The project would involve extension of water conveyance pipelines from the existing City of Arcata water main in Foster Avenue to support irrigation demands associated with the onsite landscaping. These water demands would be met through hand-watering using hoses for approximately 500 sf of landscaped areas. While water would be applied at agronomic rates, these rates are dependent on several factors including soil type, crop type, and humidity levels. However, a typical summer vegetable garden demands approximately one inch of water per week. If the entire area designated for greenhouse use is used for agriculture, water demand would be approximately 500 gallons per week or less than one acre feet per year. This quantity is assumed to be an overestimation of the water demand because the watering would only be needed during warmer period of the year (e.g., two or three months).

The project site is located within the City of Arcata's water service area. The 2020 Urban Water Management Plan (UWMP) for the City of Arcata, which is the most recent UWMP available, was developed in cooperation with the Humboldt Bay Municipal Water District (HBMWD), the regional wholesaler, and with other Public Water Systems who are also municipal customers of HBMWD. While the project would be supplied via a retail agency, wholesale water supplies are presented below to show a larger picture of water supply and demand. As shown in Table 3.19-1, supply exceeds demand for retail uses by over 600 acre-feet per year (afy) through 2040. This surplus is the same during normal, dry, and multiple dry year scenarios (City of Arcata 2021).

Table 3.19-1 City of Arcata Water Availability (Supply minus Demand) during Normal, Dry, and Multiple-Dry Years

	2025	2030	2035	2040
Wholesale	24,085	23,978	23,868	23,754
Retail	718	684	648	610

Source: City of Arcata 2021.

As shown in Table 3.19-1, surplus retail water supply associated with the City of Arcata substantially exceeds the project demand of less than one acre foot per year during normal, dry, and multiple dry years (i.e., between 718 to 610 afy of water is available via the City's retail supply through 2040). Additionally, water available from HBMWD, the regional wholesaler, indicates a surplus of over 23,000 afy during normal, dry, and multiple dry years through 2040. The project's demand would not substantially affect water supplies associated with the City or HBWMD. Because there is adequate retail supply, as well as wholesale supply that provides water to the City as a retailer, sufficient water is available to serve the project's demands. This impact would be **less than significant**, and no mitigation is required.

c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?

No impact. The project would not generate wastewater. Therefore, there would be **no impact** on wastewater treatment capacity.

- 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) Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than significant impact (d) and e). The project is estimated to generate up to 4,500 cubic yards of debris during construction and site clearing activities. In accordance with Section 5.408 of the CALGreen Code, the project would implement a Construction Waste Management Plan for recycling and/or salvaging for reuse of a minimum of 65 percent of nonhazardous construction and demolition debris generated during project construction. Additionally, the project would also be required to meet Leadership in Energy and Environmental Design (LEED®) v4 requirements for waste reduction during construction. Collections bins would be provided on the site for refuse, recycling, and compostable collection. Waste generation would be minimal and limited to parking lot users. Thus, the project would not generate solid waste in excess of State standards, substantially affect landfill capacity such that additional waste disposal facilities would be required, or otherwise impair the attainment of solid waste reduction requirements. This impact would be less than significant, and no mitigation is required.

3.20 WILDFIRE

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
	XX. Wildfire. Is the project located in or near state responsibility areas					
	or lands classified as high fire hazard severity zones?					
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?			\boxtimes		
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 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?					

3.20.1 Environmental Setting

The project site is located on undeveloped land, that is partially surrounded by suburban development. It is not located in the SRA or land designated as a VHFSZ (CAL FIRE 2025).

3.20.2 Discussion

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 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?

Less than significant impact (a), b), c), and d)). The project site is located on undeveloped land, that is partially surrounded by suburban development. It is not located in the SRA or land designated as a VHFSZ (CAL FIRE 2025). Due to the site's location within an urban/suburban setting that is served by the Arcata Fire Department (see Section 3.15, "Public"), the risk of wildfire is low. As discussed above under Section 3.9, "Hazards and Hazardous Materials," the project would involve removal of existing fuels from the project site and would not substantially increase the potential for human-cause ignition. Thus, potential impacts related to wildfire would be less than significant, and no mitigation is required.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	ENVIRONMENTALISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
XX	XX. Mandatory Findings of Significance.					
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 an endangered, rare, or threatened species, 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 that will cause substantial adverse effects on human beings, either directly or indirectly?		\boxtimes			

3.21.1 Discussion

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 an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Less than significant impact with mitigation incorporated. Implementation of Mitigation Measures 3.4-1 through 3.4-6, identified in Section 3.4, "Biological Resources," of this Initial Study would ensure that the project would not 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 an endangered, rare, or threatened species. Implementation of Mitigation Measure 3.5-1 and 3.18-1 identified in Sections 3.5, "Cultural Resources," and 3.18, "Tribal Cultural Resources," respectively, would prevent the project from significantly affecting previously undiscovered resources or eliminating important examples of the major periods of California history or prehistory.

The project-related impacts would primarily occur during construction and would be mitigated to be less than significant. The post-project operation would not adversely affect biological or cultural resources. Therefore, the potential of the project to potentially degrade the environment is considered less than significant with mitigation.

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. As presented throughout this environmental checklist, the project would result in less than significant impacts or impacts that are mitigated to less than significant levels. Mitigation measures are presented in Chapter 3 that would reduce potentially significant impacts to aesthetic resources, biological resources, cultural resources, noise, and tribal cultural resources to a less than significant level. Therefore, the project would not result in significant construction or operational environmental impacts, and the project would not contribute to significant cumulative impacts.

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

Less than significant impact with mitigation incorporated. The project would have potentially significant impacts related to aesthetic resources, biological resources, cultural resources, noise, and tribal cultural resources. However, all of these impacts would be reduced to less than significant levels with incorporation of the mitigation measures included in the respective section discussions above. No other direct or indirect impacts on human beings were identified in this IS/MND. Therefore, this impact would be less than significant.

This page is intentionally left blank.

4 REFERENCES

1 Introduction

No references used in this chapter.

2 Project Description

City of Arcata. 2019 (June). Creek Side Homes Project. Draft Environmental Impact Report. Available: https://www.cityofarcata.org/DocumentCenter/View/8629/Draft-EIR-Creek-Side-Homes-Arcata-2019-06-20. Accessed: June 18, 2024.

3 Environmental Checklist

3.1 Aesthetics

California Department of Transportation. 2024. California State Scenic Highway System Map. Available: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed June 17, 2024.

Caltrans. See California Department of Transportation.

City of Arcata. 2024. Arcata General Plan Update. Draft Environmental Impact Report. State Clearinghouse number 2022020107. Available: https://www.cityofarcata.org/DocumentCenter/View/13935/Arcata-GP-DEIR 20240126. Accessed June 2024.

3.2 Agriculture and Forest Resources

- California Department of Conservation. 2024a. Search for Maps, Reports, and Data. Available: https://www.conservation.ca.gov/dlrp/fmmp/Pages/county_info.aspx. Accessed June 2024.
- ——. 2024b. *Web Soil Survey*. Available: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed June 2024.
- DOC. See California Department of Conservation.
- SHN. 2024. *Geotechnical Investigation Report, Proposed Parking Lot, APN 505-161-011, Foster Ave, Arcata.* Prepared for Cal Poly Humboldt. Accessed Jun 17, 2024.

3.3 Air Quality

- California Air Pollution Control Officers Association. 2022. California Emissions Estimator Model Version 2022.1. Available: http://www.caleemod.com/. Accessed June 14, 2024.
- California Air Resources Board. 2000 (October). Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. Available: https://www.arb.ca.gov/diesel/documents/rrpFinal.pdf. Accessed September 15, 2022.
- ———. 2005 (April). *Air Quality and Land Use Handbook: A Community Health Perspective*. Available: http://arb.ca.gov/ch/handbook.pdf. Accessed September 15, 2022.
- ———. 2013. *California Almanac of Emissions and Air Quality—2013 Edition*. Available: http://www.arb.ca.gov/aqd/almanac/almanac13/almanac13.htm. Accessed September 2022.
- -----. 2024. Top Four Summary. Available: https://www.arb.ca.gov/adam/topfour/topfour1.php. Accessed June 2024.
- California Geological Survey. 2002. *Guidelines for Geologic Investigations of Naturally Occurring Asbestos. Special Publication 124*. Sacramento, CA. Available:

 https://www.capcoa.org/Docs/poa/%5B24%5D%20CA%20Geol%20Supvey%20Asbestos%20Guidelines.r

https://www.capcoa.org/Docs/noa/%5B24%5D%20CA%20Geol%20Survey%20Asbestos%20Guidelines.pdf. Accessed September 16, 2022.

- CAPCOA. See California Air Pollution Control Officers Association.
- CARB. See California Air Resources Board.
- CGS. See California Geological Survey.
- Churchill, R. K., and R. L. Hill. 2000. A general location guide for ultramafic rocks in California—Areas more likely to contain naturally occurring asbestos: California Department of Conservation, Division of Mines and Geology, DMG Open-File Report 2000-19, 1 plate, scale 1:1,100,000, Available:

 https://www.conservation.ca.gov/cgs/minerals/mineral-hazards/asbestos. Accessed September 16, 2022.
- EPA. See US Environmental Protection Agency.
- Fehr & Peers. 2025. Cal Poly Humboldt Remote Parking Project CEQA Transportation Analysis.
- Humboldt County. 2017. *Humboldt 21st Century General Plan Final EIR*. State Clearinghouse Number 2007012089. Available: https://humboldtgov.org/626/Draft-Environmental-Impact-Report-EIR. Accessed February 2025.
- North Coast Unified Air Quality Management District. 1995 (May 11). *Particulate Matter (PM10) Attainment Plan Draft Report*. Available: https://ncuaqmd.specialdistrict.org/files/6f1ad639b/NCUAQMD+Attainment+Plan+5-95.pdf. Accessed September 16, 2022.
- OEHHA. See Office of Environmental Health Hazard Assessment.
- Office of Environmental Health Hazard Assessment. 2003 (August). *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. Available: https://www.cityofdavis.org/home/showpublisheddocument/4231/635803240370600000. Accessed August 8, 2022.
- SMAQMD. See Sacramento Metropolitan Air Quality Management District.
- Sacramento Metropolitan Air Quality Management District. 2016. *Guide to Air Quality Assessment in Sacramento Count Chapter 7, Odors*. Available: https://airquality.org/LandUseTransportation/Documents/Ch7Odors%20FINAL6-2016.pdf. Accessed September, 2022.
- US Environmental Protection Agency. 2012 (April). 2008 Ground-Level Ozone Standards: Region 9 Final Designations. Available: https://www3.epa.gov/region9/air/ozone/index.html. Accessed March 2025.
- ——. 2016. *Criteria Air Pollutants*. Available: https://www.epa.gov/criteria-air-pollutants#self. Last updated October 19, 2016. Accessed September 15, 2022.
- ———. 2025. EPA Greenbook. Available: https://www3.epa.gov/airguality/greenbook/ancl.html. Accessed March 2025.

3.4 Biological Resources

- Ascent 2024 (February). Cal Poly Humboldt Parking Lot Nesting Bird Survey Memo. From Carlos Alvarado, Senior Wildlife Biologist and Marianne Lowenthal, Project Manager to Deirdre Clem, California State Polytechnic University, Humboldt
- Cal Poly Humboldt. See California State Polytechnic University, Humboldt.
- California Department of Fish and Wildlife. 2010 (July). *California Salmonid Stream Habitat Restoration Manual*. Accessed June 20, 2024. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=22610&inline
- ——. 2014a. Essential Connectivity Areas California Essential Habitat Connectivity (CEHC). Accessed May 31, 2024
- ——. 2014b. Natural Landscape Blocks California Essential Habitat Connectivity (CEHC). Accessed May 31, 2024
- ———. 2018 (March 20). Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.

- California Native Plant Society. 2024. Inventory of Rare and Endangered Plants of California (online edition, v3-9.5). Available: http://www.rareplants.cnps.org. Retrieved April 5, 2024.
- California Natural Diversity Database. 2024. Results of electronic records search. Sacramento: California Department of Fish and Wildlife, Biogeographic Data Branch. April 5, 2024.
- California State Polytechnic University, Humboldt. 2007 (January 30). 2nd Addendum to the EIR for the 2004 Master Plan Revision, Humboldt State University.
- ———. 2023 (September). *Cal Poly Humboldt Parking Lot Project, Draft Aquatics Resource Delineation Report.*Prepared by Ascent Environmental.
- City of Arcata. 2019 (June). Creek Side Homes Project. Draft Environmental Impact Report. Available: https://www.cityofarcata.org/DocumentCenter/View/8629/Draft-EIR-Creek-Side-Homes-Arcata-2019-06-20. Accessed: May 2024.
- CDFW. See California Department of Fish and Wildlife.
- CNDDB. See California Natural Diversity Database.
- CNPS. See California Native Plant Society.
- eBird. 2024. eBird: An online database of bird distribution and abundance. *eBird*, Cornell Lab of Ornithology, Ithaca, New York. Available: http://www.ebird.org. Accessed April 10, 2024.
- Holland, R. F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Nongame-Heritage Program, California Department of Fish and Game. Sacramento, CA.
- Humboldt State University. See California State University, Humboldt.
- National Marine Fisheries Service. 2001 (September). *Guidelines for Salmonid Passage at Stream Crossings*. National Marine Fisheries Service Southwest Region. Available: https://media.fisheries.noaa.gov/dam-migration/fish_passage_at_stream_crossings_guidance.pdf.
- NMFS. See National Marine Fisheries Service.
- Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. *A Manual of California Vegetation*. Second edition. California Native Plant Society Press. Sacramento, Ca.
- US Fish and Wildlife Service. 2024. Information for Planning and Consultation (IPaC) Resource List. Generated June 6, 2024.
- USFWS. See US Fish and Wildlife Service.

3.5 Cultural Resources

- Ascent. 2024. *Cultural Resources Technical Report for the Cal Poly Humboldt Foster Avenue Parking Lot Project.*Prepared for Cal Poly Humboldt. Prepared by Roberto Mora.
- Rich, William. 2016. A Cultural Resources Investigation for the Village Student Housing Project, Located at 2905, 2725 and 2765 St. Louis Road Arcata, Humboldt County, California. Document on file at the Northwest Information Center, Sonoma State University, Rohnert Park, CA.

3.6 Energy

- Cal Poly Humboldt. See California State Polytechnic University, Humboldt.
- CEC. See California Energy Commission.
- California Energy Commission. 2017. Renewable Energy Overview. Available: https://www.energy.ca.gov/programs-and-topics/topics/renewable-energy. Accessed June 2024.

- California State Polytechnic University, Humboldt. 2021. *Climate Action Plan 2.0.* Available: https://facilitymgmt.humboldt.edu/climate-action-planning. Accessed June 2024.
- EIA. See US Energy Information Administration.
- Fehr & Peers. 2025. Cal Poly Humboldt Remote Parking Project CEQA Transportation Analysis.
- Pacific Gas and Electric Company. 2022. *PG&E Climate Strategy Report*. Available: https://www.pge.com/pge_global/common/pdfs/about-pge/environment/what-we-are-doing/pge-climate-goals/PGE-Climate-Strategy-Report.pdf. Accessed June 2024.
- PG&E. See Pacific Gas and Electric Company.
- US Department of Energy. 2022. Alternative Fuels Data Center. Available:

 https://afdc.energy.gov/stations/#/analyze?region=US
 CA&show_map=true&country=US&access=public&access=private&fuel=BD&fuel=CNG&fuel=E85&fuel=HY&fuel=LNG&fuel=LPG&fuel=ELEC&lpg_secondary=true&hy_nonretail=true&ev_levels=all. Accessed June 2024.
- US Energy Information Administration. 2017. Annual Energy Outlook 2012 with Projections to 2050. Available: http://large.stanford.edu/courses/2017/ph241/grace1/docs/0383-2017.pdf. Accessed June 2024.

3.7 Geology and Soils

- City of Arcata. 2019 (June). Creek Side Homes Project. Draft Environmental Impact Report. Available: https://www.cityofarcata.org/DocumentCenter/View/8629/Draft-EIR-Creek-Side-Homes-Arcata-2019-06-20. Accessed: June 18, 2024.
- SHN. 2024. *Geotechnical Investigation Report, Proposed Parking Lot, APN 505-161-011, Foster Ave, Arcata.* Prepared for Cal Poly Humboldt. Accessed Jun 17, 2024.
- Society of Vertebrate Paleontology. 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Available: https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines.pdf. Accessed June 18, 2024.
- SVP. See Society of Vertebrate Paleontology.

3.8 Greenhouse Gas Emissions

- California Air Resources Board. 2021 (July 11). California Greenhouse Gas Emission Inventory. Available: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf. Accessed June 2024..
- ———. 2024. Top Four Summary. Available: https://www.arb.ca.gov/adam/topfour/topfour1.php. Accessed June 2024.
- California Energy Commission. 2021. Cal-Adapt Annual Averages Tool. Available: http://cal-adapt.org/tools/annual-averages/. Accessed June 2024.
- California Natural Resources Agency. 2017 (May). *Draft Report: Safeguarding California Plan: 2017 Update*. Available: http://resources.ca.gov/wp-content/uploads/2017/05/DRAFT-Safeguarding-California-Plan-2017-Update.pdf. Accessed June 2024.
- ———. 2018 (January). *Safeguarding California Plan: 2018 Update*. Available: http://resources.ca.gov/docs/climate/safeguarding/update2018/safeguarding-california-plan-2018-update.pdf. Accessed June 2024.
- California Polytechnic University, Humboldt. 2025. Campus Carbon Footprint webpage. Available: https://www.humboldt.edu/sustainable-campus/carbon-footprint. Accessed: February 21, 2025.
- CARB. See California Air Resources Board.
- CEC. See California Energy Commission.

- CNRA. See California Natural Resources Agency.
- Intergovernmental Panel on Climate Change. 2013. Chapter 6, Carbon and Other Biogeochemical Cycles. Pages 465–570 in *Climate Change 2013: The Physical Science Basis*. Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Available: https://www.ipcc.ch/report/ar5/wg1/. Accessed June 2024.
- ———. 2014. *Climate Change 2014 Synthesis Report: Summary for Policymakers*. Available: https://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf. Accessed June 2024.

IPCC. See Intergovernmental Panel on Climate Change.

3.9 Hazards and Hazardous Materials

- CAL FIRE. See California Department of Forestry and Fire Protection.
- California Department of Forestry and Fire Protection. 2025. Fire Hazard Severity Zones. Available: https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones. Accessed February 2025.
- California Department of Toxic Substances Control. 2024. Envirostor. Available: https://www.envirostor.dtsc.ca.gov/public/. Accessed June 2024.
- City of Arcata. 2021. *Emergency Operations Plan*. Available: https://www.cityofarcata.org/DocumentCenter/View/11114/City-of-Arcata-Emergency-Operations-Plan-EOP. Accessed February 2025.
- DTSC. See California Department of Toxic Substances Control.
- Humboldt County. 2019. *Humboldt County Community wildfire Protection Plan, 2019*. Humboldt Bay Area Planning Unit Action Plan. Available: https://humboldtgov.org/DocumentCenter/View/70837/48-Humboldt-Bay-Area-Humboldt-County-CWPP-Final. Accessed February 2025.
- ——. 2025. Evacuation Mapping. Available: https://humboldtgov.org/3219/Evacuation-Mapping. Accessed March 2025.
- State Water Resources Control Board. 2024. Geotracker. Available: https://geotracker.waterboards.ca.gov/. Accessed: June 2024.

SWRCB. See State Water Resources Control Board.

3.10 Hydrology and Water Quality

- California Department of Conservation. 2024c. California Tsunami Maps. Available: https://www.conservation.ca.gov/cgs/tsunami/maps. Accessed June 2024.
- DOC. See California Department of Conservation.
- Federal Emergency Management Agency. 2024. FEMA Flood Map Service Center. Available: https://msc.fema.gov/portal/home. Accessed June 2024.
- FEMA. See Federal Emergency Management Agency.
- NCRWQCB. See North Coast Regional Water Quality Control Board.
- North Coast Regional Water Quality Control Board. 2018. *Water Quality Control Plan for the North Coast Region*. Available: https://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/basin_plan_documents/. Accessed February 2025.
- SHN. 2024. *Geotechnical Investigation Report, Proposed Parking Lot, APN 505-161-011, Foster Ave, Arcata*. Prepared for Cal Poly Humboldt. Accessed Jun 17, 2024.

3.11 Land Use and Planning

City of Arcata. 2019 (June). *Creek Side Homes Project. Draft Environmental Impact Report*. Available: https://www.cityofarcata.org/DocumentCenter/View/8629/Draft-EIR-Creek-Side-Homes-Arcata-2019-06-20. Accessed: June 18, 2024.

3.12 Mineral Resources

Humboldt County. 2007. *Humboldt County General Plan. Preliminary Hearing Draft*. March 15th, 2007 Workshop. Available: https://humboldtgov.org/DocumentCenter/View/2105/Chapter-16-Mineral-Resources-PDF?bidId=. Accessed June 2024.

3.13 Noise

California Department of Transportation. 2013 (September). *Technical Noise Supplement*. California Department of Transportation Division of Environmental Analysis. Sacramento, CA. Prepared by ICF Jones & Stokes.

Caltrans. See California Department of Transportation.

City of Arcata. 2020. The Arcata General Plan: 2020. (Amended October 2008). Available: https://www.cityofarcata.org/160/General-Plan. Accessed September 12, 2022.

Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment Manual*. US Department of Transportation Federal Transit Administration. Washington, DC. Prepared by John A. Volpe National Transportation Systems Center.

FTA. See Federal Transit Administration.

3.14 Population and Housing

City of Arcata. 2019 (June). *Creek Side Homes Project. Draft Environmental Impact Report*. Available: https://www.cityofarcata.org/DocumentCenter/View/8629/Draft-EIR-Creek-Side-Homes-Arcata-2019-06-20. Accessed: June 18, 2024.

3.15 Public Services

Brazil, Leah. Business Manager. 2022. Arcata Police Department, Arcata, CA. September 16, 2022—email message to Eric Cohen concerning current staffing levels and the ability to serve the Student Housing Project with law enforcement services.

Humboldt County Sheriff's Office. 2022. Humboldt County Sheriff's Office webpage. Available: http://humboldtgov.org/2545/Sheriffs-Office. Retrieved September 1, 2022.

3.16 Recreation

No references used in this section.

3.17 Transportation/Traffic

California State University. 2025. Enrollment Trends Over Time: FTE Count. Available:

https://tableau.calstate.edu/views/SelfEnrollmentDashboard/EnrollmentSummary?iframeSizedToWindow=tru e&%3Aembed=y&%3AshowAppBanner=false&%3Adisplay_count=no&%3AshowVizHome=no. Accessed March 10, 2025.

California State University, Humboldt. 2004. Final Environmental Impact Report for the 2004 Master Plan Revision for Humboldt State University.

CSU. See California State University.

CSU Humboldt. See California State University, Humboldt.

Fehr & Peers. 2025. Cal Poly Humboldt Remote Parking Project CEQA Transportation Analysis.

RCAA. See Redwood Community Action Agency.

Redwood Community Action Agency. 1999. Humboldt Bay Area Bike Map. Available: https://nrsrcaa.org/bikemap/entire.html. Accessed May 21, 2025.

3.18 Tribal Cultural Resources

Ascent. 2024. *Cultural Resources Technical Report for the Cal Poly Humboldt Foster Avenue Parking Lot Project.*Prepared for Cal Poly Humboldt. Prepared by Roberto Mora.

3.19 Utilities and Service Systems

- Calrecycle. 2025. SWIS Facility/Site Activity Details. Anderson Landfill, Inc. (45-AA-0020). Available: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1049?siteID=3457. Accessed March 2025.
- City of Arcata. 2021 (June). *City of Arcata Urban Water Management Plan 2020*. Available: https://wuedata.water.ca.gov/public/uwmp_attachments/5342038810/2020%20UWMP%5FFinal%5Fadopted. pdf. Accessed February 2025.
- Rogue Disposal & Recycling. 2025. Our Landfill. Available: https://drycreeklandfill.com/our-history. Accessed March 2025.
- UCCE Master Gardener Program. See University of California Agriculture and Natural Resources Master Garden Program.

3.20 Wildfire

CAL FIRE. See California Department of Forestry and Fire Protection.

California Department of Forestry and Fire Protection. 2025. Fire Hazard Severity Zones. Available: https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones. Accessed February 2025.

3.21 Mandatory Findings of Significance

No references used in this section.

This page is intentionally left blank.

5 REPORT PREPARERS

California Polytechnic State University, Humbol	dt
Michael Fisher	
Kassidy Banducci, LEED AP	Director, Planning, Design & Construction
Scott Harris	Project Manager, Planning, Design & Construction
Deirdre Clem	Project Manager, Planning, Design & Construction
California State University, Office of the Chance	ellor
Anne Collins-Doehne	
Andrea Abrego	Environmental and Grants Program Manager
Ascent Environmental, Inc. (EIR Preparation)	
Chris Mundhenk	Principal
Marianne Lowenthal	Project Manager
Jacklyn Bottomley	Environmental Specialist
Matt Brehmer	Air Quality/GHG Analyst
Julia Wilson	Senior Air Quality/GHG Analyst
Grace Mannell	Biologist
Tammie Beyerl	Senior Biologist
Roberto Mora	Cultural Resources Specialist Analyst
Alta Cunningham	Senior Cultural Resources Specialist Analyst
Lisa Merry	GIS Specialist
Gayiety Lane	Publishing Specialist
Michele Mattei	Publishing Specialist
Riley Smith	Publishing Specialist
Brian Perry	Graphic Specialist
Fehr & Peers (Transportation)	
lan Barnes, PE	Senior Transportation Engineer
Bruno Lertora	Transportation Engineer

Report Preparers

This page is intentionally left blank.